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THE
PAIR

# BUSINESS BUILDING

## A COMPLETE GUIDE TO BUSINESS FOR THE WHOLESALER, RETAILER, MANUFACTURER, AGENT, ETC.

*Edited by* FREDERICK F. SHARLES
F.S.A.A. (GOLD MEDALLIST), A.C.I.S.

ASSISTED BY UPWARDS OF THIRTY SPECIALISTS AS CONTRIBUTORS
WITH NUMEROUS PHOTOGRAPHS, DIAGRAMS, FORMS, ETC.

*In Two Volumes*

VOLUME I

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# EDITOR'S PREFACE

"SHOW me the man who never makes a mistake, and I will show you the man who never does anything," is one of the many sayings attributed to Napoleon. Whether it was he who actually framed the saying matters little; what matters is its truth, and its unerring portrayal of man's mentality. But while the man who does things makes mistakes sometimes, it is the wise man who insures against mistakes, and although failure teaches a valuable lesson, it is success that provides the best model.

Business pioneers experienced the difficulties common to all pioneers. They had not the means that exist to-day of avoiding mistakes: they had no guides in the development of their enterprises: they were their own architects as well as their own builders; and their lessons and instructions were obtained at the cost of their own experiments and mistakes. Consequently, only the great men succeeded—the few who were gifted with outstanding capability, energy, and observation, that vague yet distinctive quality called character, and, perhaps, not a little good fortune.

To-day success is not the preserve of the great. The growing library of business publications is a great leveller of opportunities. In the present work—an entirely new development—skilled and trained men have added to their own wide experience and special knowledge the observation and examination of the experiments and methods of the business community, and they now offer the fruits of their labours to their colleagues in business. The business man must always be the builder of his own fortune, but he can now secure, in these pages, the services of business architects and guides that were not available to his less fortunate predecessor.

The term "business" is perhaps one of the most comprehensive terms in the language, and the business man's knowledge and responsibilities must be correspondingly wide. A complete and practical signpost in the maze of business activities has long been wanted, and the Editor modestly expresses the hope that the present work supplies the want. It is intended to be a guide and a work of reference to which business men and women can turn for help in planning their schemes, in organizing and developing their business, and in dealing with the problems that continually confront them. Every effort has been made to avoid technicalities, and to tell the business man in plain, unmistakable language, not only the best thing to do, but the best way to do it.

It is hoped that the work will be useful not only to the beginner, but also to the established man of business—for the latter should remember that he cannot

stand still: he must go either forward or backward; and unless he is continually on the watch for improvements he will, in these days of competition, certainly go backward. This is a practical way of stating the important economic law that "Profits tend to disappear." It is believed that this work will help the experienced man of business to effect improvements in his organization and its profits, without disturbing the machinery of his business in its running.

Nor must it be thought that the term "business men" means employers only. In these days, even in a small business, the employee takes a part in the working of the business machinery; often it is to him that problems are delegated; and it is hoped that reference to these pages will help him materially in solving his problems, and in presenting to his employer those *constructive* suggestions that mean so much to the employee's progress, and even to his career.

F. F. SHARLES.

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*Photo* *Elliott & Fry*

THE EDITOR

FREDERICK F. SHARLES

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SECTION I

# Business and the Business Man

## OPPORTUNITIES OF TRADE, ROOM FOR THE "SMALL MAN," HOW THE NEW MAN GETS HIS TRADE, PRINCIPLES IN BUSINESS, THE TRADER AS AN EMPLOYER, OVER-TRADING

MANY people, and especially those who are remote from commercial ways and actions, are unaware of the ever changing and always varying aspects of business. Here is the real life of adventure and initiative. There is no romance like the romance of commerce.

It is better frankly, at the beginning of this work, to admit that there are some people who are unsuited by temperament and character to enter trade on their own account. Many of these would make excellent employees and be capable of climbing to highly-paid places of trust and responsibility; others again would do well in other paths of life.

Business, especially where one is one's own master or the employer of others, requires certain combinations of qualities which are not found in all people. The costermonger may possess them equally with the merchant and be relatively as successful. They have little to do with status or wealth; they can be developed but not created by education. They belong to the man himself.

It is wise for all men to know their limitations (this does not mean, of course, to accept discouragements, from within or without, too easily), and to be prepared, when the notion of starting a business presents itself, to regard the idea with proper caution.

It would be a poor service indeed for this publication to perform, to encourage the unsuited man or woman to enter trade.

### Scope for the Enterprising Man.

Before dealing with those qualities which it is desirable to possess, emphasis should be laid upon the facts that there really are openings for the enterprising man who aspires to make his own business, and that the commercial world offers him as many chances of success as ever it did.

It has become a very largely accepted tradition that all trade is rapidly passing into the hands of a few great concerns, and that the day of the beginner is over.

This is sheer nonsense. What is more, this very notion is as old as the hills. Our grandfathers as young men lived in a business world in which "trade seemed rapidly passing into the hands of a few great concerns," and our grandchildren will have a similar experience.

The truth is, every generation sees its own captains of industry—men not at all disheartened by the big things around them, and side by side with them also grow up a generation of traders, successful, though with more limited notions of success.

Take the best-known business firms of to-day. In a very large number of them the man who made the concern, or who brought it from an infant to a giant, is still alive, directing its affairs. Others are but in the second generation of their success, and (in some cases) already missing the genius who created them.

### The Vast Opportunities of Trade.

The firms our grandfathers feared—where are they? The firms our grandchildren may rival and subdue—if you seek their monuments, look around you!

The whole essence of business is personality. The great trader of to-day may create a near approach to a monopoly *for to-day*, but he hasn't the slightest "say" in the making of the great business of twenty years hence. He can organize and systematize, rule sources of supply and markets, and build up the most precise engine for trading the world has seen, but he cannot create a concern that will automatically run itself.

This is as it should be. Business belongs to the man, not to the engine the man has made.

A second important fact that makes this age favourable to the trader is that our lives become increasingly complex, and with each addition to the sports, cares, toils, remedies, recreations, and interests of humanity, arise countless new trades.

Go to any average provincial town, say Watford or Norwich, and take the oldest inhabitant out for a walk. Get him to point out the number of shops that weren't there when he was a boy, and note how many of them sell articles he had never heard of as a boy.

Get the grocer's price list and go through it item by item with him and then count up, not the number of new firms, but the number of new *kinds*

of firms that must have come into existence. Do the same with other price lists.

Borrow a copy of the London "Buff" Book, the telephone book in which firms are classified according to trades and professions, and then calculate how thin a volume it would be when you have struck out the lists of traders on their own account who had no existence in the early days of the oldest inhabitant.

Take the word "electric," for instance, with its various associations. Take the words "motor," "cycle," "shorthand," "typewriter," "accountant." You will cry, "Whatever did our grandfathers do for a living?"

And your grandchildren will have the same perplexity, for we are only at the beginning of this sort of increase of trades in which men may be their own masters.

## Room for the Small Trader.

In spite of the growth of multiple shops, departmental stores, co-operative societies, amalgamations, trusts, and limited companies, there are more people in trade for themselves to-day than ever there were, and the number will multiply.

It is probable that even in old competitive trades the number and average individual prospects of single traders has increased. Take the grocery trade, for example; it has suffered the fiercest competition. But would any one like to assert there are fewer separate traders in it or that their average income has declined against, say, thirty years ago?

## Individuality in Trade.

A third important point to remember is that though the age may seem to favour multiplicity of copies and though the sale of well-known brands may increase, there is growing up a strong public sentiment in favour of individualized articles.

Public taste is improving, and year by year there are larger numbers of people to be found who prefer unique things. They like the mark of the separate mind and the separate hand.

The same taste which is giving the fair-to-medium-average artist a decent living where a generation ago he would have starved in an attic, is going to have its effect in business. The very people who would prefer a two guinea hand-painted picture by a real artist to a print, may prefer the special jams made in the actual farm kitchen to the most famous brand advertised on the hoardings.

We may yet see a new era in which the man who is part trader and part master of a handicraft will hold a place in popular esteem he cannot hold at present.

Take an illustration from one important branch of trade. Women always place a value upon specialization in dress and millinery. There appears to be a fondness in the feminine nature for the garment or hat that is unique. In consequence it matters little how capital and business ability combine, for do what they will they can never drive the man or woman out of trade who can supply the special article unlike anything else on the market. Kensington may increasingly build its gigantic stores, but quite as rapidly will increase the hat shops, blouse shops, jumper shops, and garment shops that may be only a few yards square and have but one or two assistants.

Who knows but that with the growth of taste in men and women we may see whole rows of new shops spring into being in every town, every one of which contains, or is associated with, a specialist? Hitherto we have kept art and commerce largely separate. When they come more closely together there may be larger chances for the small man with the connection he can personally foster and cater for, and with the mark of individuality upon all his wares.

## Overhead Charges the Bane of Established Firms.

The beginner at a business, in comparing his prospects with those of the huge established corporations, is apt to overlook one important advantage.

He starts with no overhead charges for old, dead capital.

"Interest on nearly a million capital has to be found before we new people get a farthing," said the managing director of a well-known concern some time ago.

Of that million, considerably more than half had been withdrawn in actual cash by the original holders of the business. The concern was solid and not one of those problematical financial bubbles that readjust their shares at every occasion of need, and the controllers had to earn a thousand pounds a week to pay interest on dead money.

Of course, there was the value of the "goodwill," but "goodwill" in this case largely meant the unusual capacity of a brilliant man, who, withdrawing himself at the same time as he withdrew his money, left the business doubly crippled.

The beginner knows little or nothing of that bugbear of the old-established concern, "overhead charges." Many of these may be costs that the new trader must meet, such as rent and similar expenses, but, in addition to all current expenses, there is pretty certain to be a heavy tax upon the weekly business done which, in itself, constitutes a substantial percentage.

We are so accustomed to regard the great

trading concern as capable of working at a lower rate of cost than the smaller unit, that we accept as a general truth what breaks down in countless instances. The biscuit factory keeping a steam oven running night and day on one kind of biscuits, can probably give greater value to the public in that line than any small hand-maker could, and yet bear heavy dead costs as well as those of carriage and distribution.

Equally, the great mill, with its thousands of looms and its standard makes of cloth, can compete and carry heavy dead weight charges as well. The great printing works triumphs in the long run of a million copies ; the screw and nail works in the standard commodities made by the ton.

But . . . overhead charges frequently place the big firm out of competition in the small job, and here is the new man's chance ! The printer with hand power only and a few dozen cases of type, can turn out a thousand handbills at a price which would not pay the big printer to enter the order. The baker's wife can boil her hundredweight of strawberry jam and sell it at a larger percentage of profit than the huge firm boiling by the ton.

And in this connection it is well to remember that the new trade is often the small trade.

Let a new fashion, interest, activity, or hobby arise, and at its start the workman with his few hand tools is as well equipped as the great factory. When the motor industry commenced, quite costly cars were made in little workshops that would give Mr. Ford a nightmare. In the early days of cycles, out-of-work watch-makers turned their nimbleness of fingers to account in making the new velocipedes.

## Always Openings for the New Trader.

It is not here contended that the man who is starting in business must search for freak trades or methods. These constitute opportunities, but they are not the only ones. The ordinary standard heavy lines of food, clothing, furniture, and similar material are dealt with in concerns which constantly vary in their personality. The new firm is continually coming in : the old firm is constantly dropping out.

## How the New Man Gets His Trade.

It is not easy to generalize on the methods by which new traders succeed, but it is quite easy to explain why a great many do not succeed. One explanation probably covers the majority of cases.

It is this : The only excuse for opening a new business is that such a business has an advantage to offer. The advantage may be very small, but it must be there. It may belong to practical acts, such as quicker delivery of goods, or it may belong to the mental world, saving customers the trouble of trying to remember what they want by some handy system of reminders.

That this fact is not grasped by many of those who fail to succeed is evidenced by the apparent carelessness with which people enter the trades in which it is very difficult indeed to show any advantage over other traders.

Presumably the attitude of mind of such beginners is that the trader lives on what he gets instead of what he gives. His reasoning is : " If there are already nine grocers in the town and I open another grocery store, in the course of time I ought to get a tenth of the trade." He expects that business will be " given " to him because he is one with the others.

Now, this is all wrong. In opening a shop and proceeding on these lines he may succeed, but the chances are that he will not.

But, supposing this same man reasons in this way : " There are nine grocers in this town and not one of them will deliver goods on Saturday because it is market-day. I will make Saturday delivery a feature of my trading " ; he is beginning to reason on sound lines.

This advantage might not be sufficient—probably it would not be, as most likely his example would be followed before he had built a business ; or it might be an unfair advantage of such a nature that public sympathy would go against him, Saturday delivery in the midst of market-day work having been found to cause a breaking strain on the assistants and having been cancelled by agreement, to which the public assented.

But the new trader would be on the right lines of thought—a line that, properly pursued, might prevent his opening a shop till he really did see the need and opportunity.

## Trade is Service.

A man about to start in business for himself went over the project with a man who had traded on his own account for years. He laid everything frankly before his friend and then asked his opinion.

" You are all wrong. You won't succeed on those lines," was his friend's abrupt summary.

" Why not ? "

" Because," said the adviser, " of one phrase you keep repeating. The phrase is 'ought to give me.' According to you, Brown, Jones, Smith, and Robinson ought to *give* you some of their orders. They won't ! Not one of them ! There is nothing given away in business nowadays. You go to a man in that spirit and you don't go as a trader—you go as a cadger.

" Your attitude to these men must be different. They are hard at work, with many duties to perform, and the hardest part of it all is to find people capable of doing things for them, or to find time in which they can do the work themselves.

" Here are three splendid kinds of opportunity

for you. You can approach them with one or all of these three arguments: 'Saves time'; 'Saves labour'; 'Saves oversight.' Don't you see? *You* would be *giving* something."

One can imagine here that some indignant and high-minded reader will protest, "This is very low down sentiment. It means that no one is to enter trade unless he can 'go one better than his neighbours.' Along this path lie sweating, unfair competition, cutting, and the act of the blackleg."

Nothing of the sort! There is, and must be, a constant evolution in trade. Were we to rely upon the methods of our forefathers, half our congested cities would starve or succumb to disease. Problems that are being thrust upon us of increased population, developed tastes, and wider possibilities of life, involve a constant advance in methods of distribution, manufacture and trade, as well as progress in discovery and invention.

In commerce, progress, over a given number of years, is the sum total of all those acts in which traders, and new traders especially, have seen an opportunity of serving some end better than it had been served before.

It is admitted, of course, that some of these may be wasteful or costly acts. Competition as a whole is economical, but there are cases in which competition may actually increase costs; such, for example, as the struggle to secure the best retail premises, which sends up rent.

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## The New Idea!

The man with the new idea stands the best chance in opening the new business, provided that idea is sound and helpful. It need not be boldly

original—some of the best ideas, in this way, are mere adaptations of old methods to new conditions. The departmental store, for example, is but the village general shop "writ large." The travelling household supply store is but the pedlar on wheels.

is so full of surprises in this respect as the realms of commerce.

IDEALS. Thus: holding the history of trade before one's eyes and keeping present business in fairly sound perspective, one would be inclined to regard "Idealism" as a more suitable quality for

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But, other things being equal, it is the "idea" that tells all the time.

## Surprising Qualities that Help to Success.

And herein lies the great difficulty of forecasting success or failure, and of judging any man's fitness to enter trade for himself. The writer prefers to think of combinations of qualities rather than of single qualities in dealing with commercial capacity; for there is no place in the world that

the poet's sanctum than for the merchant's office. Yet, in meeting some business men, and especially some very successful business men, it is amazing to find on what ideal principles they endeavour to shape their course.

IMAGINATION one might regard as a rather undesirable element in the practical affairs of bustling trade, but woe betide the trader who is entirely devoid of this quality, for without it he will constantly find himself in dilemmas for which mere routine and precedent are not sufficient.

Without endeavouring to lay down in precise lines any definite rules by which the embryo trader may know himself, it is possible to make certain generalizations which can be helpful. The first of these is a rough division of humanity into two classes. These are—

(*a*) The people who can manage somehow, with greater or less success, to do things on their own account; and

(*b*) The people who require somewhere or other, responsibility to be taken off them, or who need the main lines of their actions mapped out for them.

It is with the first class that we have to deal, for those who belong to the second are wisely advised never in any circumstances to enter trade for themselves, or, having entered it, to cut themselves free from its cares as swiftly as they can.

The division indicated above may appear very arbitrary and fallacious, but the writer is convinced it constitutes a fairly accurate summary of humanity as viewed by its fitness for trade. In this connection, he would not be inclined to make such a sweeping generalization about women as about men; for woman is universal and man is specialist.

To put the case with frankness: there are many men who are "employers' men" in spirit and in outlook. Somewhere along the line of their activities, they must feel that behind them is a mind to direct, or they are lost. At the crisis moment, the impulse is to obey rather than to decide, to look for authority rather than to take responsibility.

Such men are not limited to the lower ranges of work; they often make most excellent employees; they often display originality and learn to settle things for themselves. But right away in the very heart of them is that dependence upon superior authority which is part of the temperament and character and which cannot be broken down.

The second generalization is: that a successful trader has usually at least one very strong point in his character; whether it follows that for exceptional success some quality must be abnormal it would be difficult to decide, for the characteristic of the great business to-day is its all-round completeness. But, from what can be gathered of the character of our greatest traders, it might be no exaggeration to push the contention as far as this.

That strong characteristic, whatever it is, requires the support of other qualities: two men may possess it equally and one succeed while the other fails; the reason being that it is an unsupported or an undirected quality in the second case.

Thus, for instance, there are two men both marked with an overmastering love of work that makes them both like springs of perpetual motion. One of them has a knack of rushing at the vital thing that needs to be done first, adding direction to zeal, while the other does what is nearest and hasn't any thought of what may lie round the corner.

Again, two men have remarkable gifts of caution and foresight. But one of them is also blessed with the courage to say "Snap!" when the right time has come to say it, a gift which the other lacks.

Or two men are equally and exceptionally ingenious in finding new methods, but one has restraint, and experiments in a small way before he applies in the large; while the other is a careless "whole hogger" and makes confusion of his business with an unsuited scheme.

Here are a few opinions on business qualities, as viewed by different minds, which show the impossibility of indicating any fixed rules—

Work.

A. "I attribute all my success to my love of hard work. It was because I was fond of it I entered trade."

B. "Nonsense. In any other career you must push the pen or ply the tool yourself. I entered trade because I dislike work, and I attribute my success to my knack of finding many willing folk who would do it."

Foresight.

A. "I entered business because I can weigh chances and have a turn for diplomacy and rarely make mistakes."

B. "Quite the reverse with me. I entered trade because I am a natural blunderer and business is the one place in the world where you can afford to make twenty mistakes as long as you find a twenty-first line that isn't a mistake. One can keep repeating the successful act and avoiding the unsuccessful."

(A perilous opinion this last, unless regarded in its real meaning. What was clearly meant was that the speaker was enterprising in testing new ideas, and persistent in holding on to those proved to be sound. A traveller opening new ground may be very glad to make twenty-one calls in order to secure one customer; and an advertising firm may willingly experiment with over twenty different forms of advertisement, in order to find a really "pulling" address.)

Buying and Selling.

A. "Salesmanship is the vital point of business. It involves all the real problems which are chiefly psychological. A well-informed junior can buy."

B. "'Well bought is half sold.' It is easy enough to find markets if one can get the right goods to offer. Good buying includes tapping new sources of supply, wrestling with traffic and carriage problems, fighting for terms and discounts. To buy bargains means ability to sell bargains, and such goods sell themselves."

So it will be seen from these points that, in commerce, it is impossible to indicate any special virtue or capacity that spells success.

## Personality the Chief Commodity of Commerce.

The business man stands in this relation to the world : that the chief thing he has to offer is his own personality. The problem of business for him is in what way he can find the highest market value for that personality, or, in other words, in what way he can make it of most use to his fellows.

Sweeping aside exceptional times, such as war-time, it may be taken as a rule that great success implies improved service. Most large businesses extend because they satisfy a want or offer a new convenience or comfort.

The business man who is commencing to-day, may well take stock of himself, as well as of his possessions ; for it is in the abilities and limitations of his own character that is written success or failure.

Time was when a man learned a trade very much as people learn the rules of a game, and worked his business by the rules he had learned. It was supposed to take five or seven years for a man to learn how to be a grocer, just as it might be presumed it will take two seasons for a man to learn to be a passable player of tennis, or bridge.

But within the last generation thousands of men who learned the grocery business well and truly have discovered that nothing in their early training provided the proper formula of success when the co-operative society opened on one side ; a multiple shop on the other ; and the stores across the road started a grocery department.

Learning a trade is not an action to be discounted in any way. In this work every effort will be made to emphasize its value ; but even when a trade has been thoroughly mastered, there is no guarantee in these times that a careful adherence to the method and tradition of the past will be of any value whatever.

A generation or two ago the man who had learned a business from a competent master, and who could find a suitable shop and had sufficient capital to stock it, was justified in expecting that industry and the rules he had learned would achieve all his reasonable wishes.

To-day he would be only wise to act on such an assumption if he could rely upon himself to be an emergency man in circumstances his experience had not covered.

But working to an old plan with a mental reservation to "do something startling" when "something startling" is needed is not a good plan of campaign. It may be a splendid thing for a man to know that he can trust himself to act at his best when he gets into a tight corner : but his plan of campaign should be arranged so that there won't be any tight corners.

He is out to do business. His chief stock-in-trade lies in his own abilities. Let him value them.

The result of the valuation may be that the man finds himself rich in just those qualities with which the business world appears to be over-stocked. For instance, he believes himself to be a good buyer, an able salesman, and a hard worker. Outside these abilities he does not possess any outstanding power. A large number of people commencing in trade would sum themselves up in this way, and modestly feel that the mere possession of these qualities was no guarantee of success.

And they would be right.

The hardest worker in a business may be the man on the packing loft who draws the smallest wage. The ablest salesman may be a loss to his firm by keeping to a poor ground or being careless about giving credit, while the keenest buyer may buy entirely unsuitable articles.

The object of discovering one's own strong points is that by applying them sanely they may be "directed," and not wasted.

As an illustration, take the case of a man who has learned his business in an old-fashioned but quite alert firm—a provincial house with its long-fronted shop and its warehouses in the rear. Such businesses are fewer than they were, but they survive, for the firm is both retail and wholesale.

He has been only medium to average in the shop. In the warehouse he has been something of a hero, for he has practically started a new department. Barges of sugar, flour, and heavy goods have been brought up the canal in quantities far more than sufficient for the trade of the firm. His special *forte* has been that, while not in the wholesale department, his powers of salesmanship (quite unsuited for small retailers) have given him an easy entry to the chief manufacturers and the firm's opponents over the whole county, so that, what meant disposing of a carelessly bought cargo in the first place, has become a heavy and profitable business.

The firm, however, has changed hands, new methods are to be adopted, and the man is to leave. He has money and intends to start on his own account.

Taking a careful survey of his own capabilities, he recognizes that in many points he is not strong. He cannot dress a window. He dislikes counter chatter with customers. His arithmetic runs to big sums, and "tuppeny ha'penny" articles bore him. But he can meet a great merchant or manufacturer on grounds of common interest and discuss the world's markets with authority, rarely closing an interview without opening his order book.

The suggestion around which this young man's mind is playing is that somewhere he shall endeavour to establish just such a business as

the one he is leaving. According to the methods of the past, it would be the obvious thing to do, for the idea of the past was, "Copy what has been done and you can't go adrift."

Now, supposing he yielded to the temptation and did the obvious thing. What would happen?

The retail business would absorb all his attention, or, if he devoted time to following his real bent, he would do so at the peril of his last farthing of capital. However lively and prosperous he might make his wholesale transactions, he would be asking for trouble by tying his venture to a carelessly contrived retail establishment.

The man who boldly values his strong points against his weak ones would be doing so without an object unless he lets the knowledge frame his policy. He must do this so as to make his programme—he should not make his programme first and then calculate how the gain on the swings may balance the loss on the roundabouts. If the roundabouts are doomed to be a loss, his plan should be drawn so that they are cut out altogether.

Because he has worked a profitable special wholesale or brokerage trade in connection with a profitable retail trade, it does not follow that he must start or take over another retail trade, which may easily be unprofitable, in order to run the business he understands.

Some reader may question: "Then what shall he do? He knows the business he has just left. He wants to open his own concern. What alternative has he?"

The answer is obvious. If he wishes to start his own business, he would be courting disaster to do so in any way which did not give full scope for his chief power, and a retail or a general wholesale trade would not give him this. It would simply be a dead weight to clog and hinder him.

There are many openings in which he can start at once if he knows them, though perhaps none precisely along the line with which he is familiar. He would be wiser to be patient for a few months and increase his experience in some other variations of brokerage and trading among great firms. His gifts of entry and salesmanship have a weekly value, easy to realize, and as a commission salesman for some great Manchester or London importers he would be learning his best ways of approach to his own concern, and meanwhile be building his connection.

The difference between such a man blindly copying a pattern, and planning to give his strongest power its fullest play, could easily be the difference between hopeless failure and brilliant success. There are wealthy merchants in London who would have collapsed in a village store, and equally there are great retail traders who would have been day-book clerks to the end of the chapter in a wholesale trade.

Take stock! Realize your strong point!

## Principles in Business.

"Dishonesty ties one so," said a trader jestingly.

It does. The man who sets out to be unfair in his trading, must give personal attention to every act, while the just man can work very successfully by deputy.

This is really a great discovery of business. It was almost certainly discovered because of a love of principle more than because of a love of profit. All other things being equal, the honestly conducted business grows on simple healthy lines; while the dishonest concern is limited to the possibilities of the reach of one man.

When the rule of a firm is "Deal honestly," and the organization is good, a thousand workers can work on the plan with ease, for the youngest office boy can understand the underlying spirit of the method. But where the rule is the reverse of this, every increase of workers and every extension of the machinery increases the chances of haphazard and confusion.

We all know what gigantic calculations, involving huge and intricate problems, can be worked out on the powers and laws of simple arithmetic. But would the easiest equation be soluble if two and two sometimes made five and sometimes made seven? Those accustomed to mathematics know that the great value of the calculation largely rests upon the unvarying value of the signs and symbols.

The discovery of commerce is that complicated business requires unvarying rules and symbols as much as mathematics does. There is only one way of adding two and two correctly; but there are ten thousand ways of adding for a false total. There is only one way of honesty—there are ten thousand ways of sharp practice.

Now the man who wishes to extend his operations beyond the scope of his own personal activity must find simple methods or he will fail. He can set a hundred people working justly and gain a profit, but let him set half the number working unjustly and he will be the chief victim.

The effort to defraud by deputy has been made, is being made, and will be made in the future. But no big business grows that way. The test of the enduring concern is that it challenges the searchlight of audit; that dishonesty becomes apparent or futile.

Some time ago one of the judges making a comment upon a commercial case which had been tried in his court, expressed amazement that a decision was arrived at by a number of business men involving a very large sum of money, and that no binding legal agreement recorded the decision. He suggested that such methods were loose and foolish.

Perhaps they were. In the particular instance, since it was made the subject of a law proceedings, it would have been an advantage to have had more than the verbal bargain.

But the judge missed the real point—which is that the trader does not look upon a sale or purchase quite in the same way as does a man of legal mind. In the first place, the basis of trade is mutual trust. Were there no confidence there would be no business done. Reputation ranks higher than a legal instrument to each party. The great merchant binds himself by his own jotted note on his blotting-pad; the salesman regards his pocket-book entry as sufficient to set a department working overtime upon a special order.

"We don't need to check their invoices," is the reason a retailer gave for dealing with his supplying London firms. It was an answer that gathered up the real meaning of the term "Goodwill."

The stranger to business customs in this country would be startled were he to learn the amount of trade that is done every day by verbal agreement, no note being passed on either side. Disputes, of course, aries at times, but woe betide the luckless disputant who dares to take any other line in business than "my word is my bond."

This is not stated here as any endorsement of loose methods. It is probable that many traders are rather too lax when big sums are involved. But the point is noted to emphasize the fact of the goodwill of honesty.

There are firms around Eastcheap and St. Paul's receiving daily from their clients all over the land orders and cheques that amount to amazing totals. Some of them are able to estimate the trading account worth of the connection in a line of seven figures. These same firms would need to write down that value a good 50 per cent on a single case in which they were proved or even suspected to be dishonest. These firms do not deal direct with the public; they may scarcely be known to them by name.

There are, however, hundreds of others who are known, because they have placed their name or trade mark upon a brand. No contract may be made, but one is understood, that no dishonest tampering with the value or quality of the goods shall take place. They stand or fall by their reputation.

One of the saddest stories of commerce—fortunately not often heard—is that of the good old reputation bartered away for a rather shady present gain. It is the costliest deal in trade.

## The Financier in Trade.

We are living in a time when great financiers, some of curious history, are getting into commerce, becoming directors and owners of well-established firms. Their arrival brings to light a curious fact: that in business they must either abide by this insistent law of the game, or withdraw from it. They may do quaint things on the Stock Exchange with the shares of the companies. They may withdraw money and ladle in water. But they learn to keep these acts to those places in which goodwill values are bought and sold.

In the actual trading operations of the firm they are sane enough to avoid any act that cannot bear analysis. A company's shares may be under-quoted or over-quoted, bulled or beared. The company may be re-constructed, reduced, inflated with new issues, or treated in any kind of fantastic way, and the proprietors still hold the market. But let any manipulative method of shady character be transferred from the broker's office to the counting house or factory, and the firm's goods will lose their sale.

Every act in commerce has its two aspects and usually aims at obtaining two separate profits. One is immediate and the other deferred. One is to-day's profit for to-day's labour. The other is the cumulative value that constitutes connection, trade friendship, publicity, and goodwill.

It is a tendency of trade for the first of these profits to shrink and the second to increase. Nowadays a traveller does not expect his connection to be profitable on his first round of journeys, or a shopkeeper to close his first month's accounts with a balance to the good. Such things may happen, but they are exceptional.

The deferred profit is being stored up all the while a man trades in the most curious of all banks: the mind of the possible buyer. It is really a very safe bank, giving generous, if tardy treatment. Treated fairly, it honours all reasonable drafts, but once deceived it declares the account overdrawn and closed.

Honesty must not be advocated in a work of this nature from its highest ground, as this book is not a study of ethics; but it can and should be advocated as sound commercial policy. The straighter the method, the easier it is to multiply it indefinitely.

## Courage in Business.

This is an age of courage. We have learned that cowardice is really very rare. One of our leading war correspondents, who has witnessed eight or ten wars intimately, assures us that he has only met two instances of cowardice in the field in his life, and in one of those the man gained a decoration for personal bravery a little later.

It is scarcely recognized sufficiently that to be a good business man requires an unusual degree of courage.

Here are a few instances of where courage fails—

"Easy times you commercials have," said a draper to a traveller he met strolling in the park near the main street.

"Easy!" was the retort. "This is Monday, and for three hours I have been wandering up and down this benighted waste you call a park, trying to muster up nerve to make my first call."

"And it is every Monday the same," he added.

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MESSRS. LEVER BROS.' FIRST SHOP IN WIGAN
(Premises on right of opening)

That traveller was the joy of his firm and a master of the art of salesmanship, but never actor suffered from stage fright as he suffered from fear of the first call for the week.

Only commercial travellers, and it may be not many of them, can describe that "Monday feeling." The man who is liable to it must be a brave man indeed to overcome his dread.

There is a well-known London merchant who cannot face a telegram. His confidential clerk, who is charged to open such missives, dares not even use the word "telegram" in giving him the message it contains.

There is a successful provincial merchant in a large way of business, who is constantly in trouble with the Income Tax Assessors because no threat or entreaty will induce him to take stock. His business is profitable. This is apparent. But he has a fear of making an actual Balance Sheet that cannot be overcome. It is no longer the fear that stock-taking will show a loss, but that was the cause of the strange weakness. At one time he fought a hard fight for solvency, and knew through a succession of bad seasons that his capital was gradually draining away. He had not courage to ascertain if he were still solvent. He preferred to fight on in the dark.

When he rounded his corner, the old fear still bound him, and even in prosperity he dared not face some facts.

These cases are quoted here because they are much more numerous than we suppose, and, unfortunately, are not quite as happy in results as those told above.

There are critical times to many traders when much moral courage is required to read the morning post, especially the letter with the name of the bank on the back of the envelope.

"If I act it must be to-day. If I leave action till next week I *may* have the luck to do just as well—but it will be luck," is the kind of situation which calls for courage.

There is a time in business when hard work is better than analytical calculations. When trade is bad and a run of ill-fortune seems to be playing havoc with profits, it may be wiser for a man to gird up his loins and pitch in than to brood over percentages and trading account morals.

But—when he does this it should not be out of fear of facts; but because he realizes facts

quite sufficiently to make him eager after remedies.

In some cases it may be doubtful if a little courage in facing facts would alter the final result. When a man's business methods are wrong, all the courage in the world won't put them right. A lion-hearted shopkeeper who persistently sells cheaper than he buys will lose money.

But, in other cases, there are men who would be prosperous to-day instead of "down and out," but for that lack of courage to face the worst at a critical moment—

"The prayer of Ajax was for light,
Through all that dark and desperate fight,
The blackness of that noonday night;
He asked but the return of sight
To see his foeman's face."

This courage of Ajax is the right courage of trade: the courage to see the foeman's face and to know the worst.

One of the questions the would-be trader should ask himself is: "Am I brave enough?"

Business needs courage—a very high order of moral courage.

A highly-paid member of the civil service poured out some financial worries to a manufacturer as they strolled along the suburban road, coming to one of the occasional oases of shops in the desert of semi-detached houses. The man of business had listened and marvelled. He had re-assured and reasoned and explained and soothed and sympathized. The snag that had worried his friend was so absurdly trifling to him.

But the civil servant refused to be comforted, and his voice rose up to high heaven at his perplexity. The man of business suddenly became stern. "You may thank goodness," he said, "that your bread comes to you buttered. Look at those three shops across there"—(they were very small shops)—"If you faced the financial problems of any one of them you would be a haggard-eyed spectre in a week."

## Human Nature in Business.

"What do you know that specially fits you to enter business?" asked an adviser.

"I know a good deal about human nature," was the reply.

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ENTRANCE TO MAIN OFFICES, LEVER BROS., LTD., PORT SUNLIGHT

"Well, if that's true, you'll soon pick up the rest."

This is a rather bold summary of business, but has much truth in it. A knowledge of human nature is the best knowledge of all in trade because it gives direction and driving force to every other ability. Let the man have the human qualities and he can usually find out how to use his other powers to an effective end; let him be without these, and he is likely to tear down faster than he builds.

The human nature idea of things is that you put persons first and articles second—that all along the line you see the human mind as your chief study.

Two shopkeepers open in business. One of them troubles little about the wishes of the public and troubles a great deal about the goods he stocks. The other studies his public at every moment, and stocks in accord with his conclusions. Which will build his business quicker?

Two travellers go out on the road. One of them knows all the prices and all the grades of qualities, but has no understanding of humanity. The other has but an average knowledge of his subject, but can meet his fellow man on grounds of common interest the moment he meets him. Which will build his connection quicker?

It is, however, possible to carry the argument too far. Human nature qualities will not counterbalance continued carelessness or gross ignorance; and it not infrequently happens that the best gift a trader can possess blinds him to the need of backing this outstanding ability with others.

A man's strongest quality is frequently his greatest danger, as well as his greatest advantage; and in no place is this more noticeable than in the possession of this gift. The entry into the business world is like an entry into a long course of studies, not always profound or intricate (because business should always be kept simple and uninvolved), but always demanding care and thought.

The beginner who has wondrous powers of getting on with his fellows, of reading them as a book is read, and of playing up to the human instinct at all times and in every way, and is content to let his effort go at that, is very much like the clever student at the university, who dazzles his fellows and overwhelms the professors, but who gets plucked at the examination.

These human-nature qualities have a way of controlling a man's career, unless he is careful to keep a grip of them. Thus: A man has been learning his business with a great London firm, and promotion has come rapidly. He has left the irksome restraints of the counting house for the delightful freedom of "the road." The chief buyer is annoyed at losing the smartest general factotum he ever had, and the secretary of the company is upset that "the only clerk with a head on his shoulders" should be taken away from the office. But the working partner rubs his hands gleefully at the rolling stream of heavy orders.

What shall be this man's future? He has been a success all round, but chiefly "on the road." It is not difficult to imagine this young man in forty years' time still carrying a sample bag—doing "rather well," but with no reserves, and a fear of losing his job, which would spell disaster.

With his gifts and aptitudes and his dislike of irksome duties, it is a little more difficult to imagine that he has addressed himself to some of those problems that lead to a directorship, or the small kingdom of one's own business, or the place where one's fate is not settled by others in an inner office.

Many a man is on the road to-day, at sixty, with a kind of "needs-must" keeping him there, who would have been far more prosperous had he got off it at thirty.

Travelling is used here only as an illustration. Outdoor salesmanship is the natural occupation of some people and they may be wise to keep to it. The real point is that the possession of the qualities of which we speak makes some duties very pleasant and others rather laborious, with the effect that purpose and ultimate results may not be sufficiently regarded.

It should be the aim of every man who enters trade, to succeed in trade, as it should be his personal plan to reach the place where he himself can be most successful. In fulfilling this endeavour he is more likely to make his work useful to his fellows and profitable to himself than by taking the least resistance path. Success is a worthy commercial aim, and it is only chaotic thinking to regard it as anything but an advantage to the community. If the great merchant is lost to trade because he preferred the ease of the commercial hotel to the monotony of the daily journey to the city, trade suffers as a whole, and the big tasks of manufacture, distribution, and organization are further off effective undertaking to the extent of his unused ability.

To those who are the fortunate possessors of genial and social gifts of human-kind there is always the temptation to avoid difficulties and float on the surface of things.

The young man who finds he can gloss over the effect of his own careless act by a pat on the shoulder or a hearty hand-shake, has usually two courses before him: one is to avoid repeating the blunder, the other is to grow even more unctuous in shoulder-patting, and more genial in hand-shaking. One is a sane course—the other is a slippery slope.

When a knowledge of human nature is united to a scorn, whether little or great, for humanity, the possession is a very doubtful blessing in business. Lasting success is rarely built by the possessor; there is discomfort for all who work with him, disillusionment for all for whom he works.

It is well to realize the perils that press around the "human nature" man in trade—the temptation to be careless and superficial, to despise routine and order, to rely on personal magnetism rather than personal ability.

Yet, when all is said, human nature qualities remain about the best stock-in-trade a man in his own business can possess. That business may not involve his mixing very largely with his fellows, for when it is well organized it may be almost possible to bury himself in his private office and carry on all his operations by deputy.

But at the bottom of all business lies the human element. At all times, and especially at crisis times, the trader must be able to face his fellow as man to man. He will not get workers to work for him in the best possible way without understanding their nature, or unless he possesses the right kind of capacity to direct it. He will not find he can keep his workers working together in harmony unless he has sufficient of the human in himself to cement their energies into a definite active whole.

The above words are written as an encouragement to those people who take a rather modest view of their attainments, and who yet are distinctly strong in this respect. Such gifts may require constant watching and careful control, but the possessor is very strongly armed indeed in competitive callings of trade.

Strongest of all is the position of the human-nature man in those parts of trade which are rapidly becoming recognized as the most vital parts. These are the acts that relate to aggressive salesmanship.

Whether a business makes its appeal through travellers, indoor salesmen, or advertising, at the centre of every such appeal is a message sent out to living minds. The man who is essentially human is most at home in this work, and the best judge of sure and efficient ways of stirring the customer's thoughts.

No trading concern can live without salesmanship, and salesmanship is human nature knowledge pure and simple.

## Foresight and the Business Plan.

"This is my fourth start in life," said a man of over sixty years of age.

A listener commiserated with him, presuming that the other attempts had ended in ordinary kinds of failure. But the old commercial campaigner would have none of it.

"My attempts were all successes in the financial sense," he declared. "One of them turned out to be a very great success. Why shouldn't they be? I am a tremendously energetic man, and I know how to make a business hum."

"It is weary work starting again at my age," he added, "and I have very little capital. But I am not afraid."

That man's story was remarkable. With one important exception he possessed the chief qualities that make a great trader. His misfortunes had all come from a lack of foresight.

He had started in his first business supposing himself to be a partner in a concern that bore the other man's name. There was little doubt that the two men regarded the arrangement as a partnership, but there was carelessness in making records, and as salaries were raised when the business grew, there was no need for divisions of profits. Whether the senior partner intended to act unjustly or not was never known, but when he suddenly died, his co-worker and co-planner had not a single scrap of paper to show by which he could prove any right of proprietorship.

One man had supplied all the capital, the business was in his name, and the cheques had all been signed by him; the other could prove nothing more than that he had received a large and increasing salary, and that he had assumed the manner of a partner in dealing with employees and customers.

In his second venture this trader had not repeated his first blunder. The business had borne his name and no other, and lest there might be any doubt about it, his two christian names had appeared in full.

But this business grew too rapidly, and it became a limited company. It was not wisely limited, from the point of view of the original owner, and the time came when the creator of the concern found himself outside the office door, and the affair heading for prosperity without him.

The third venture was a retail business. It grew. It could not help growing, for the man was a moving mountain of energy. But the good man had taken a seven years' lease, and had given no thought to the fact that leases run out. At the end of seven years, he was under compulsion to take a back street shop or nothing. The back street shop had not done well, and he had cut the loss, escaping from absolute disaster with a hundred pounds or so to his name.

Now here was a man who possessed many great capabilities, but was too satisfied in the knowledge of his powers and the love of work, to think about difficulties till he was right up against them.

This, up to a point, is a very excellent trait. It is often a sane kind of sense to leave emergencies till they come and then take them as part of the day's work, instead of regarding every act as the possible prelude of disaster. It frequently happens that a man is all the better engineer of fortune when he acts with a certain blind courage and hopes for the best.

But every commercial calling has certain points that are vital, and real insight consists in the ability to pick out those points, and regard them with reasonable foresight and caution.

Now, when a man is trading under another

person's name, it would occur to most of us that there were two rather important points involved : (1) responsibility for the other man's acts and liabilities, and (2) security of one's own interests.

Equally when a retail business is established, the owner begins to perform a work which, if successful, will improve the value of another person's property. Under our present land system it is not always possible to avoid some risk of inroads being made upon a tenant's profits, or to guarantee that he will not be obliged to find other premises. But this is not a problem of the last hour ; it is part of the burden of every day, and should be constantly before the mind, so that the best moment may be seized for making new arrangements or the best premises be chosen for a transfer.

In these days, too, of one-sided leases and rights of pre-emption, it is often easy to obtain all that is wanted for absolute security, provided the first arrangement is made with a view to the future.

It is said that there are two kinds of people in trade, those who can make money and those who can keep it, and that whenever the two qualities are found well-developed in the same man, that man will be a millionaire.

The statement is rather highly coloured, but contains elements of truth. There are many people who are so cautious that they will always conserve what they can make, but unhappily lack the boldness and driving force that enables them to make anything worth conserving. It is very much to be doubted if over-caution is a particularly desirable quality to possess when the task before one is the creation of a new business. The possessor may sometimes make a very good partner when allied with a man of enterprise and vigour, but even here it is easy for him to hinder rather than to help.

Making one's own business is at all times a bold challenge to circumstances, and it is little to be wondered at that it is the more venturesome kind of man who is attracted by the task. The way of success, however, among these bold spirits, is the middle way, that avoids rashness upon one hand and inaction on the other.

The would-be trader may not hope to avoid all mistakes, and he should not weaken his nerve and resolution by thinking too much about the chances of misadventure. The ordinary commercial acts of every day present him with a long series of actions in which he can "let himself go" without much need for analytical calculation of consequences. It is part of reasonable commercial expense to test any promising new openings, even with the chance of their not turning out well ; for a business man can repeat his successful methods over and over again, and equally he can avoid repeating his blunders.

The enthusiastic traveller who starts out to open new ground may call upon a dozen firms which will never buy, in order to find one which will ; while the over-cautious man, intent on economizing effort and remembering he is under heavy expenses, may miss the one excellent and continuous buyer because he will not waste effort on what may be fruitless calls.

There is a great deal of room for the man of non-hesitating energy in trade, and he is, by nature, the best equipped to make a new business. Whatever that man may do, he cannot afford to become nerveless and timid. He must put dash and enterprise into his work, especially in all that is ordinary and commonplace in his work.

It is in the exceptional acts that he needs caution. Just those places where he gets off the line of ordinary business are the places where he should "take a pipe over it before he signs," or, still better, "sleep on it."

These things are leases, partnerships, agreements, transactions directly involving law, new agencies, changes in the larger policy of trading, bringing in new capital. A bit of "slap-dash" may be all right at the counter, in the warehouse, or on the road. But there is no room for "slap-dash" here.

"My name across stamped paper cost me all I had made in twenty years," said a trader recently, "and all because I didn't read it carefully."

## Where a Plan Protects a Trader from Big Mistakes.

It is probable that most of the vital errors business men make are the results of having no definite plan of campaign.

In greater or lesser degree, most traders avoid rigid, cast-iron programmes, for they know that trading brings unsuspected openings which it would be foolish to neglect. Thus, a firm intending to act as wholesale grocers in London and the Home Counties may find the London trade impossible and the provincial trade more workable the farther off it is carried, and at the same time that the general stock they had contemplated keeping is not so suited as a few special lines.

A great carriers' business in the provinces is the out-growth of a little outside work undertaken by a firm to keep fully occupied the horses and vans necessary to its own purpose.

Some of our chief banking concerns grew out of retail shops, the shopkeeper obliging his customers by looking after their money for them.

A large and successful typing agency in London was started for quite a different purpose, outside typing being first undertaken to keep the typists employed during a quiet season.

A chocolate shop in the provinces began displaying a few trinkets and cheap rings in one window. Within ten years it was such a flourishing jewellery business that the very idea of toffee would have seemed a slight upon the silver-grey

plush and sparkling sheen of its costly window display.

It is often sound business to follow the easy road, and to let trade reveal its own chances.

But this does not imply that programmes and plans are valueless. A trader should know what he is aiming at, and only change that aim for good and sufficient reasons. That the task undertaken is difficult is rarely a good reason for change; that a profitable and easily worked adjunct is thrust on one, may be.

The advantage of having a programme, however it may be departed from later, is that a man can easier see the essential acts relating to the future. It is important for the young grocer to be careful about the terms of his lease, because his plan is to be a grocer. Long before the first seven years of his lease have expired, he may have developed and advertised his own little speciality in baking powder so well that "So-and-so's Curlew Baking Powder" is a household word, and its proprietor can afford to sneer at leases.

Equally, the man who started with a "Good Pull-up for Carmen" and who went nap on "The biggest penny mug of tea," will keep his penny customer in mind in that programme. He may later become the owner of a Regent Street Tea Shop, because he understands catering, but he will not play fast and loose with the essentials of either trade.

The man who starts out with the vague idea: "This hat-shop will give me a living for next year; the year after I may be manufacturing claw-hammers or importing bananas," will be well advised, in spite of the advantages of an open mind, to reason as if his hat-shop is to be permanent.

There is a type of man in the business world that loves to pass from one enterprise to another, finding constant openings everywhere, and more particularly finding commercial life a grand adventure, the new discoveries of which minister to a love of change.

The writer has known of two outstanding men of this type, both of whom were very capable and successful. There was a noticeable difference between the two. One was continually embarrassed by the long train of confusion behind him. He was always stepping forward to a better and more profitable kind of trading; from quite a small shopkeeper he became, after half-a-dozen changes, the controlling genius of a large limited company with very substantial profits. But always the embarrassment of this man was how to close up the business behind him.

The other man, whose genius lay in his power to create a new business out of practically nothing, always left that business with a good cheque to swell his banking account, for, in every case, the essentials of the concern he resigned had been so carefully planned that it was easy to transfer.

These two men are referred to here not as ordinary representatives of commercial success, for most people find the way of success is not the way of "quick changes." The point is that a programme or plan may be soundly constructed, even though it does not tie the future of its maker.

An advantage, too, of the plan is the help it gives in all questions that have two sides and about which it is hard to form an opinion. Often the plan settles such problems off-hand.

## Napoleonic Methods and Other People's Capital.

Courage and boldness are always attractive qualities. In business they are needed as much as anywhere else. But in business the drawback of their possession is that it is often easy to display them at someone else's cost.

The trader who finds that he can obtain long credit and sell for prompt settlement or for cash quickly realizes that the larger his transactions, the easier his financial position. It is a sore temptation to such a man to increase his operations more rapidly than he should do, and for purposes of increased trade to lock up too much money in plant, fittings, machinery, and other non-realizable assets.

The opportunities for this kind of trade are not as many as they used to be in the days of longer credit, but they still exist.

The first "cash" stores that came into existence constituted a quite romantic study in this respect. There were men in those days who held lightly-stocked shops, who sold everything for cash, and who would have been startled at the thought of paying for goods at less than three months' credit.

Presuming the normal stock represented two weeks' turnover and it was turned into cash eleven weeks before it was due to be paid for, in theory a man's credit balance at his bank should increase with every increase of business. Each addition to trade, instead of locking up capital would leave more money available.

It is not to be wondered at that this freedom of credit resulted in a great deal of rather careless expansion, and that very easily a vicious circle was set up. Difficulties could be staved off by larger operations, and to increase the size of these, greater liabilities would be incurred by trading at a loss.

One can quite easily imagine a trader caught in an unexpected dilemma and possessing such a chance as this, deciding on a "spirited policy." It is possible that some traders have done so, and got through into smooth waters—this part of the history of a firm is not shouted from the house-tops.

But it is more than possible, it is a fact, proved over and over again, that some people have adopted such Napoleonic measures and have not achieved success. In these cases the caller of the tune has forced unwilling others to pay the piper.

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A Well-Arranged Book Shop

It is a reasonable thing for a trader to use other people's money to trade, but simple honesty demands that he should inform those people before he does so.

Many of our largest concerns require more capital than the men at the wheel possess, and by means of partnerships, debentures, and company membership, they obtain the money they can use. This is legitimate.

But, without doubt, commerce presents many opportunities for a bold man to use other people's money in operations for which their consent has not been asked.

And it is just precisely at this point that the line should be drawn between commercial courage and commercial gambling. Courage and boldness will be commended in this work. In no place, however, must the words be taken to stand for approval of wild-cat "heads I win—tails you lose" speculation.

It is courage for a man who has saved a few hundred pounds to venture his little all in a bold endeavour to start his own business. But it goes beyond the finer meaning of this word for the same man, having lost on the deal and still finding credit cheap, to start out in an adventure with the knowledge that if he loses other people will pay.

"What, then, must such a man do?" asks a reader. "Must he close up his venture just because he has started with rather too small a capital? There are many cases in which a business will pull itself through a difficult time if advantage is taken of the assistance of supplying houses."

This is perfectly true, and it is both reasonable and fair that a supplying house, giving credit, should take some part of the ordinary risks of trade. A man who, during two or three years of strenuous work, has established a little business upon sound lines, and who finds himself embarrassed through an unforeseen incident such as a strike, or a sudden fall in prices that nearly wipes out his capital, is justified in using reasonable resources of credit to bridge him over the difficulty.

But the point of the argument is this: that there comes a time in many such developments when a trader, in taking advantage of credit, involves other people in his trade to such an extent that they are partners with him in the risks. It is precisely at this point that simple honesty directs that, in making a man one's partner, it is an obligation to let that partner know something of prospects and methods.

Great supplying houses are not afraid of risks; they are least of all alarmed at an unusual loss when the usual business is sound, and will gladly assist a beginner to bridge such a peril. Also they respect the frankness of a man who puts real facts before them.

As an illustration: Some years ago a retail tradesman had a serious loss that absorbed all his capital and a little more. He had a good little business which was steadily improving and becoming more profitable. He was a very conscientious man, and the moment he realized that his account showed a loss he adopted the bold plan of stating his position whenever he purchased goods. The very frankness of the act gained a really surprising amount of support. Firms who supplied him became patient and sympathetic, and in the course of a few years the problem had solved itself, and the trader was in smooth waters again.

There are occasions in trade when a man working successfully in a rather limited sphere, and satisfied that he could do well by adopting a bolder policy, may realize that he cannot do so without support from wealthy firms.

It may be he can obtain that support surreptitiously by using credit that is given to him in the ordinary way of trade; or he can use it frankly and openly by using the same credit with the full knowledge and agreement of those with whom he trades.

Without question, the second is the right course to take. Firms *do* support business of this kind, but they like to do so with their eyes open and not to be finessed into a position they did not choose.

Some years ago a young man with very limited capital boldly laid a proposition before the head of a great firm. It practically meant being financed in an undertaking that was well conceived, and that the young man was precisely fitted to carry out.

"I will back you," said the wealthy director. "Go ahead and start at once. But—if I find you are cutting prices or doing unbusinesslike acts I shall stop your credit within an hour."

These were two men who could trust each other (and there is a great deal of trust in business). The wealthy firm wanted trade; the young beginner saw a reasonable method of bringing it to them, and at the same time of establishing himself. The firm was risking its money. The young man was putting his commercial reputation into the scale. It was a just and equitable arrangement, because it was frank and open.

It is at this point that some cautious reader will object that too much candour in a business man arms his enemies. He will ask: "What is to prevent the big firm in the case instanced regarding the small business as a kind of milch-cow and draining all the profits the young man makes. At best, the trader forms a kind of tied house."

This is true, and the position constitutes one of the disabilities of trading on other people's money. The whole incident is placed here only to illustrate the importance of frank dealing when other people's money is involved. It is not presented as the ideal start for a new business.

Throughout this book it will be recommended that a trader shall use his own capital, or the capital that is entrusted to him for the purpose ("capital" here being used in the strictest sense and not including credit). But it is not improper to enter such an arrangement as that mentioned above.

The safeguards of the action to the trader in this case would be—

(*a*) He would not enter the arrangement unless he supposed that he was dealing with an honourable firm. There *is* honour in business, and among substantial firms honour is prized high.

(*b*) The man who has made such an arrangement with one firm may make it (perhaps in a modified form) with others, and a secure position be obtained by the number of sources of supply. Quite obviously, he will trade most largely with those who treat him most fairly.

(*c*) The firm giving such terms does so at a risk of loss. It will not imperil itself by making the movements of such an agent hopeless or penal. The arrangement involves large-minded and generous treatment—or almost certain loss. Goodwill, too, counts for something. Help a trader on his feet and you have done much to secure his future trade.

It is very doubtful, too, if the secretive policy pays in business. A man need not shout his private affairs from the house-top, of course, but there is little damage done by the frank statement, "I have only a limited capital."

The temptation to put the bright side out is very great in time of real pressure and financial difficulty, and many a man fears, in such circumstances, that the general knowledge of his real position may cause a run upon him and bring about his downfall.

But this is often a groundless fear. There is a candour that inspires confidence, and really in being frank such a man does not give away very much information which is not well known before.

Every trader's position is fairly clearly known by the people with whom he trades, especially if he shows the slightest difficulty in meeting his accounts. He hides little or nothing from his creditor by secretiveness; rather he creates distrust or awakes a suspicion that he is not aware of his own difficulties.

"We can't go on with this man. He doesn't understand his own perils," is all the reward he may get for hugging his secret too closely; while his assurance that he does know, and that he means to get on safer lines, allays the fears that had been gradually forming.

There is such a thing as a trader finding himself in a position that is hopeless under his existing conditions of capital and credit, and yet possessing a business that, with more freedom of money, would probably pay well.

Such a man, working on insufficient capital, and daily finding his task harder, with the almost certain prospect of coming to disaster sooner or later, unless he has more money in his business, will explore a good many avenues in which to find partners or investors.

It sometimes happens that he neglects one of the best opportunities of all—not, perhaps, the first to be chosen, but certainly one to be preferred to any policy of hoping for luck and letting things follow their course.

This is: The consultation with creditors. Usually we think of such a step as an act of bankruptcy. But it need not be such.

Supposing a man knows that with another £2,000 he can conduct his business on immediately profitable lines, and supposing that the amount he owes his creditors exceeds this sum. His attitude is that of one asking for a moratorium to be declared.

There was an instance of this kind in London a little while ago, where the creditors, after investigation, were satisfied that the business was sound, but that without assistance it would come to grief and their immediate loss would be heavy.

Without hesitation they agreed to the concern becoming a limited company, and the debts were changed into debentures. In a few years the owners of the business had done so well that they were able to pay out the debenture holders and re-assume ownership control of the business. Had this arrangement not been made, in all probability the firm would have struggled hopelessly on to the ultimate loss of the creditors.

## The Trader as an Employer.

We have suggested that some people work more effectively for an employer than they do on their own account, and that in the commercial world there are two great sections: Those who are naturally "master's men," and those who are not.

Here, it is proposed that the second class can be still further subdivided. There are some who are at their very best when they are neither employed by others nor employers of others, but who play a lone hand.

It is by no means a reproach that one does well as monarch in the kingdom of one's own actions, and does not succeed outside it. Very often the man who is an unhappy servant is also an unfortunate master, but that same man may do all the deeds he has himself planned with wonderful completeness and success.

Before passing on to consider the employment of other people, it may be well to deal with a subject that is too little considered in trade.

"I did very well indeed when I started my business, but now I can scarcely make ends meet," said a trader some time ago.

He thought of selling his business and going back to an employed position, but the friend with whom he talked it over knew his temperament and character, as well as something of his methods,

and induced him to analyse his history since he had been trading for himself.

The man had done well and "extended." Extensions had meant "employing," and as an employer he had broken down.

That man saw the moral of the enquiry as soon as it was pointed out to him. He made no drastic change, but one by one, as his small staff found other positions, he made no attempt to fill the place vacated, till he was left at last with his one messenger-typist, a member of his own family.

This, of course, meant a somewhat diminished business, but it also meant that every part of the business came in for personal attention and every transaction brought its personal profit.

Here was one of those people who cannot work by deputy. They constitute a very interesting character study, for often they possess really excellent business abilities in themselves, but have no power of using the abilities of others to advantage.

It is not well, however, to be too sweeping in this generalization, for this limitation which entirely prevents some people being effective in using other people's labour, shows itself in varying degrees through all the ranks of employers.

Thus, there are some men who can keep two workers economically active, who would be dazed and hopeless with twenty.

There are some who can control the floor where they personally work but who do not so much allow as cause Bedlam to reign on the floor out of sight. It is not suggested here that employees are unfit to be trusted out of sight; such a suggestion is absurd. But the reader who has ever had the misfortune to work for one of those people whose plans are confusion the moment personal direction is withdrawn will understand that this breakdown is no fault of the employee.

"When the cat's away, the mice will play" when true in business is rarely, if ever, so much the fault of the workers as it is the measure of the master's limitations and the test of his fitness to control people out of sight.

"The guv'nor's away," said a man recently, "and we don't know what to do with our time. There are fifty of us in the place and we're afraid to move a finger, because whatever we do it is bound to be wrong. One feels like a thief all the time, and it's the hardest kind of work one can do, to try and keep up appearances before others and yet be doing nothing."

There are men who can manage effectively any number of workers accustomed to act under orders, but who break down when they endeavour to use the services of those who have initiative of their own.

That is to say, they may be able to use such men, but they cannot use them to the best advantage—they pay a high price for powers they do not allow the possessors to exert.

Of course, a great business must have a controlling head and a persistent policy, and the theory of every man in it acting on his own is not workable. But the amazing fact about some of our great commercial undertakings is the way in which initiative is discovered and developed.

The problem as to the extent to which it may become profitable for a man to employ others, or as to whether he should become an employer at all, is only solved by actual experience.

The point that affects the question is that employing other people's efforts may almost be regarded as a trade in itself. It is one of those trades in which money is quite as easily lost as gained. No question is involved here about sweating or tyranny, for often the man who can make this work pay is generous, and the one who cannot is a slave-driver.

It is largely a question of cultivated and studied attention, but also it is often a question of character. Some are to the manner born, while others can never make happy employers.

These latter may have to employ, but they will find it always the chief cause of their difficulties and their chief liability to loss.

## Overtrading.

The temptation to overtrade takes a lot of fighting, and the worst of it is that it never looks like overtrading till one is fairly in it.

Supposing a man's business is of such a nature that his bank balance is liable to fluctuations, or that it is necessary for him to use more capital at one season of the year than at another. That man may easily forget the obligations of the stringent period, when he is fairly out of it, and gird at the irritating fact that he has reserves available which he is not using.

Or, again, passing through a period of prosperity, when stocks are swiftly cleared and accounts are quickly paid, one can easily forget the strain upon capital of a more difficult season.

Some people launch out in such circumstances, and discover themselves overtrading almost before they are aware of it.

It is fortunate when the first essay in this kind of boldness is on a very limited scale and the trader experiences no more troubling consequence than the need for care in buying and finance during a trying month or two. But, unfortunately, many people either plunge too deeply the first time they overtrade or else refuse to learn obvious lessons.

The effects of overtrading are precisely those that arise from want of sufficient capital. Buying at advantage becomes difficult, discounts are lost. "Needs must" shapes the policy.

When the discovery that one is overtrading is made, the fact should be faced at once. Retreat is not always easy, but even this action comes in, at least, for review. In many cases the line

described as "sitting tight" may meet the emergency. This means drawing as little as possible and endeavouring to build the needed capital out of profits, while a running fight is maintained to keep the business going at full pressure on economic lines.

There is, however, a condition of this malady where even more heroic measures are needed. The various methods that will be discussed later of obtaining money by partnerships, debentures, and sales of shares, and by overdraft upon securities, will be worth considering.

Failing these, there is the frank statement of the case to creditors, as already indicated, and though this may be the last course, where it is resorted to, it should not be an unduly postponed course.

Many people, through overtrading, get into temporary difficulties quite easily dealt with if taken at once; but a policy of postponement in which every week makes the financial position worse only robs the trader of the power to make any change with advantage to himself, and must ultimately be disastrous.

## Locking Up Money.

"Better to use egg-boxes as counters than tie up the money I want for buying bargains," said a trader.

He actually did begin with counters which, if not egg-boxes, were little better. To-day he has bevelled glass, marble, and mahogany, and even in his early history his shop began to brighten up as soon as wisdom directed.

Egg-box counters won't do for a Bond Street restaurant: a sense of proportion must be observed, of course. In some trades the fittings earn the money, and the fittings come first. But, usually speaking, the beginner with small capital should cut his outlay on fixtures, plant, machinery, and furniture to the lowest possible point compatible with good working.

It is well, perhaps, to recognize here that there are business men whose methods depend upon "properties." That is to say, they would be unable to deal successfully with a client in a shabby office, or ineffective in their correspondence if it were typed on a crazy machine of erratic alignment. Such people must be armed with the needed munitions or they will fight badly.

Business conditions, too, are of such a nature that "cheap shoddy" is inadvisable anywhere, and no words in this section must be taken as approval of it.

But if a man has only £500 capital he should have a very strong reason indeed for spending £300 on permanent fixtures. If he means to be a high-class photographer, or to sell coffee at sixpence a cup, the act would very likely be sensible; or if he is going to furnish a city office and live on his wits, it may also pass. In the ordinary adventures of commerce, the outlay of so much would be folly.

It is really surprising in what circumstances heavy business can be done, and how little customers regard appearance providing the trader can "deliver the goods."

One of the most bustling recent successes of modern trading is carried on from a private office where the paper is actually peeling from the walls, and the chief partners' desk is made of flooring boards. Ten minutes in that office, however, would convince a banker that there was business doing. People forget about flooring boards and peeling paper once they get into that electric atmosphere.

Desirable as "bank-like" offices may be, it is interesting to note how the legal profession holds out against modern notions in this respect. Some of the most famous lawyers' offices are marvels of dinginess, and no loss of business results. It is possible that the modern trader is making rather too much of equipment.

Probably most beginners at trade form a fairly sound estimate as to how much money they can lock up, and how much shall be available for trading. The real temptations generally come later. At a time when there is ease in finance and the balance at the bank is pleasant, it seems just as reasonable to buy roll-top desks and linoleum as to buy currants at the docks. But one day the money which the currants would have brought back may be badly needed in the business, and no drawer in the roll-top desk will yield it.

The trader who uses plant and machinery is even more subject to temptations in this way, for every time he purchases an appliance or lays out a new department in his works, he can easily see the act as profit-making. But it can easily be profit-killing.

A wholesale cake-maker who has capital sufficient to run four steam ovens, but who requires substantial capital for this work as he must give credit, may find in some favoured period of trade that he has money available to put in two more ovens. The act may cost him dear, for the very money he has thus locked up may almost immediately be needed to run the first four at a profit.

"I have one rule of calculation about machinery," said a manufacturer. "When anyone tells me a machine costs £50, I always double the amount and multiply by ten. Thus, a £50 machine is £100 fixed, and it takes £1,000 capital to get the good out of it."

The man was speaking of his own business, but he recognized a sound principle, against which it would be folly to present all the arguments that machines make money instead of absorbing it.

"Building more suitable premises" has not always inspired greater confidence in a trader, for when a man does this by diverting his capital

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A Section of a Very Large Office

from trading use to bricks and mortar, it often makes his account more problematical among givers of credit.

In the arrangement of the subjects in the succeeding parts of this book, a convenient plan will be carried through in which each branch of business will be dealt with in the order it is presumed the trader will come to it.

But it may be well to point out that a certain sense of balance will be understood. For instance, quite early the subjects of premises, fittings, and office equipment will be dealt with, as, obviously, in many trades these are early subjects for the beginner to consider. Later will be discussed actual business acts, such as buying and selling.

In order of arrangement the premises do come first, but in the psychology of trade they do not.

In actual commercial acts, buying comes before selling, but in the right human mind order of the trader the two are reversed, for the business man should see the article sold as more important than anything else.

"Get your business first. *Then* take your offices," said a trader to a young man who was planning a start.

Impracticable? Probably it was; but the idea was right.

Later we shall deal with office arrangements card indexes, and filing systems, methods of book-keeping, and all the plan and system by which modern trade is run—all so needful in their way.

But there are men in London at the present time who have got all these things, and the latest and best of them, to whom it would be the kindest of kind services to dump the whole of them on the waste heap, and give in place a lead pencil and an eighteen-penny waste book for notes, with the advice: "Stop playing jig-saw games with *things*. Do business with people."

The arrangement of subjects in this work must be taken as one of convenience. The real arrangement of trade starts with selling. "Find your market before you make for it" is the best advice for a manufacturer. "Find your trade before you worry too much about how to do it" is the advice for the business beginner.

## The Great Percentage Delusion.

Let the trader be wary of thinking too much in percentages. These are excellent in their place, but to a certain type of mind there is no habit so bad as that which reduces every kind of calculation to one formula.

The traveller who works on commission, and obtains 5 per cent on one class of goods and 12½ per cent on another, very quickly learns to estimate the extra commission at its real worth. If it takes him four times the effort and time to sell £100 worth of goods at the higher rate than at the lower, he knows that his apparent gain is really a loss, and the profit, though nominally higher, is actually lower.

But a trader doing a general business may not be able to see this quite so clearly. An article in his shop which allows him but 12½ per cent to handle when he must make at least 17½ per cent to cover his average expenses and profit, may seem to him to actually tax him 5 per cent. But supposing that article is in such swift demand, is so easily handled, and is saleable down to the last farthing's worth, and of such a nature that he could turn over four times the amount he already does at the same or a lower cost, if his whole trade were as simple; it is probable that the article really cheapens costs and reduces his average.

The danger of the percentage habit to the beginner is the danger of being led into fantastic by-paths of trade in search of a profit that is elusive and unreal.

"I get a heavy percentage on these goods," said a trader. "I shall concentrate on them."

He did so. In a few months he found that if his whole turnover were profit, it would not be a decent income.

"I get 10 per cent," said one traveller.

"I get about ½ per cent," said the other. "What did you sell to Smithson?"

"Two pounds' worth."

"I sold him sugar and bacon—probably £500 worth."

There we have some of the truth about percentage. After all, 1 per cent on a thousand pounds is better than 25 per cent on fifty shillings.

It often takes a strong man in business to deal with the articles in regular demand, somehow or other to make or distribute those stable goods and wares that are constantly needed. The percentages of profit are often very low in these. But there is in them the constant draft of demand that means turnover.

More enticing paths in trade take many people out of this main current. But they do it at the cost of continual search.

Yet both kinds of business are good, so long as each is undertaken with a distinct understanding of the work involved and the profits probable. The error of calculation is to suppose that the greater profit of one can be obtained with the easier and fuller swing of trade of the other.

Let a man weary of brokerage in London at 1 per cent turn to selling necklaces or fancy toys by retail which give him 50 per cent. He may get his 50 per cent but he will not carry the heavy bulk trade of the brokerage connection into his new attempt.

## SECTION 2

# Business Premises

By R. W. Holland, O.B.E., M.A., M.Sc., LL.D.

### CHAPTER I

### SELECTION OF PREMISES

The selection of business premises is a matter for something more than casual consideration. Apart from the fact that a person's place of business is the place in which a considerable part of his life will be spent, and, consequently, its selection deserves some care and thought, there are places in which certain types of business would be doomed to failure. In one of the principal shopping centres of an important northern town there is a long street in which a tobacconist's shop has never been known to prosper, and yet, lying between two fashionable and important drapery establishments in the same street, there is a prosperous shop occupied by purveyors of foreign and colonial meat, a class of trade which the unobservant might have deemed to be doomed to failure in the particular locality.

#### Retailers' Premises.

Different considerations prevail in the selection of the premises for the carrying on of retail trade than those which are of importance when deciding upon the site for a warehouse or factory. In selecting retail premises, the future trader should make careful enquiry into the history of the proposed shop. He should not be afraid to venture merely because there are other shops of the same kind in the same street, provided there are sufficient customers in the neighbourhood to encourage him to make a start. In theory, there should be at least sufficient to support all the shops of the kind in the district, but the energetic man with ideas should have no fear; if there is more than enough custom to support his shop he should go ahead and eventually secure the greater part of it. Where possible, he should go thoroughly into the history of the particular premises that he desires to take, as former history in the nature of failures may have a serious effect on the prospects of the future. The absence of shops of the same type in the district may be sufficient ground to cause him to pause and look elsewhere. Sentiment has a good deal to do with the conduct of individuals, and the nature of the business previously carried on may have an effect on the well-being of a succeeding business. Human beings are sufficiently perverse to have an aversion to purchasing their daily bread on premises formerly occupied by an undertaker.

In a general way, in a shopping area, difficulties as to the carrying on of a particular trade do not arise, but it is quite conceivable that conditions may be laid down limiting the kinds of trades that may be carried on. In particular it is important where, in connection with a retail business, workrooms are in operation that the conditions shall be carefully studied before the would-be tenant commits himself. It is by no means an unusual clause in tenancy agreements that certain trades, whether obnoxious or otherwise, are specifically excluded. In retail business where dressmaking workshops, floral decoration workshops, boot repairing establishments and the like are carried on, the trader about to set up business will be conversant with the requirements of his own particular trade. In addition, however, he must become acquainted with any rules laid down regarding factories and workshops. He must enquire into the sanitary equipment and comply with all requirements as to machinery and the protection of his employees; and, in addition, he should satisfy himself that the premises are of such a nature that he can observe all the provisions of the Shops Act, both in the letter and in the spirit.

#### Manufacturers' Premises.

The manufacturer, in his search for suitable premises, has many matters to take into consideration. Some of these are of more or less importance, according to the nature of his particular trade. The proximity of an adequate water supply may be of importance, and in all cases convenience of transport must be taken into consideration. The wise and far-seeing man, having confidence in ultimate success, should look beyond his immediate requirements. When on the high road to prosperity it is not well to have to change the centre of operations. The place where one's business is carried on is sometimes intimately connected with the goodwill that is built up, and it is wise to consider the following matters not as things of the moment only but as things for the future. Are the facilities for lighting adequate? Is the district one which is likely to increase expenditure owing to rising rates? What facilities are there for extension? What is the policy of the local authority in relation to trade

buildings? What is the nature of railway and canal communication? What site possibilities are there for sidings and easy transport direct to the works? And what accommodation is there for workpeople and the erection of workmen's houses if required? These and a hundred other general questions must be asked, and in particular the would-be tenant must consider carefully, before finally selecting his land, whether or not it is subject to any restrictive covenants in relation to trade; this is particularly important if he is taking as a sub-tenant.

Something further will be said as to undertakings as between landlord and tenant, but as it is in the selection of premises that the matter arises it is well to mention what are known as restrictive covenants at this point. A restrictive covenant is an undertaking not to do certain things, and in this connection it is an undertaking not to use the premises for certain purposes. In some cases, whilst a business may be carried on, the tenant is required "not to affix any outward mark or show of business." This would prevent the tenant from displaying a simple brass plate on his door or a name on his window, and, in the case of a limited company, it would prevent the carrying out of the provisions of the law with regard to the exhibition of the company's name on the premises. Generally, however, the restriction takes the form of the prohibition of certain specified trades, and when this appears, a trade outside those specified may usually be carried on. Similarly, an undertaking not to carry on noisome or offensive trades which does not in itself prohibit the carrying on of other trades, may be found in leases of property situated in what might have been at one time residential districts. Whether a trade is offensive depends to a certain extent on the district. In one case where an undertaking had been given not to carry on a noisy, noxious, dangerous, or offensive trade, it was held that the agreement did not prevent the tenant from carrying on a laundry. Something will be said at a later stage about the duty the occupier of land, carrying on a trade thereon, owes to adjacent occupiers.

## Leasing or Buying Retail Premises.

The question of the term of occupancy is always a serious one. The young beginner in business generally feels diffident on the matter of binding himself for a long period; but in business only the long period should be considered. The retailer commencing in a new shop should have sufficient confidence in the results of his trading to enter into commitments embracing something more than a yearly tenancy. If he has not so much faith in his venture and in himself he had much better leave trade to the more confident, and remain another man's man. In taking a yearly tenancy, or making an agreement of even shorter duration, the danger lies in the vagaries of landlords. A person may build up a desirable business, and, having no security of tenure, may find it necessary to leave because his landlord wishes to use the premises for other purposes, or wishes to find accommodation for a relative or friend. Apart from this consideration, it is hardly worth while making necessary alterations and putting in fixtures and fittings if the tenure of the premises is insecure. It is essential, therefore, that a retailer take a lease of the premises of not less than seven years' duration, since there is usually no difficulty in obtaining a new tenant in case things go awry. Where considerable expense is to be incurred by an incoming tenant, it should be possible to spread this expenditure over several years, and where the business expected is one of moderate extent, a twenty-one years' lease, with the tenant's option to discontinue at the end of seven or fourteen years, is quite reasonable. The purchase of premises for retail business is a matter for future consideration. The beginner in business is usually not in a position to buy, and, in any event, the wisdom of buying is a doubtful quantity.

## Leasing or Buying a Factory.

Security of tenure in the case of a manufacturer is perhaps of greater importance than in the case of a retail trader. Having decided on a possible site, and satisfied himself that all the questions already suggested can be answered to his advantage, and that the occupancy of the premises selected will not saddle him with onerous conditions and extensive outgoings for paving, draining, and the like, the manufacturer may turn to a consideration of the advantages, if any, to be gained by purchasing the property. The chief advantages of buying are that the benefit of any enhanced value caused by his occupancy accrues to the manufacturer himself, since, if he leases and makes a success of his business, his very success may drive the price up against him should he want to renew his lease or to buy in the future. Again, if he is the owner of the premises he may do with them as he chooses, provided that he in no way interferes with the rights of his neighbours, or, in the case of a long lease, provided he keeps the undertakings or covenants that he has given. Thus he is able, without interference from any landlord, to put in what machinery he will, and to work it in what manner he chooses consistent with factory laws. In the case of a lease, on the other hand, there might be certain limitations on the amount of machinery that he could run; agreements would probably be made in relation to fixtures, and difficulties often arise as to what are landlord's and what are tenant's fixtures. In certain trades extensive alterations to premises consistent only with ownership are necessary, and, in general, the business man must be guided by his own particular trade. Given a bare building, for instance, with an adjoining yard, the necessary

# Skeleton Lease for Business Premises for Seven Years

*THIS INDENTURE made the day of One Thousand Nine Hundred and between THOMAS BROWN gentleman of the City of Exminster (hereinafter called the Landlord) of the one part and WILLIAM HENRY WILSON of The Grove Melbourne Road in the City of Exminster retail provision merchant (hereinafter called the Tenant) of the other part*

*WITNESSETH as follows—*

*The Landlord hereby demises unto the Tenant*
*All that ground-floor of premises situate and being No. 1 Market Street in the said city of Exminster coloured yellow on the plan annexed hereto and thereon edged with a red line TO HOLD unto the Tenant from the First day of January One Thousand Nine Hundred and for the term of Seven Years paying therefor during the said term yearly the rent of One Hundred Pounds a year by equal quarterly payments to be made on the First day of January the First day of April the First day of July and the First day of October such rent to be payable in advance if demanded without any deduction (except for Landlord's Property Tax)*

*The Tenant for himself and his assigns and to the intent that the obligations may continue throughout the term hereby created hereby covenants with the Landlord as follows—*

*(1) to pay the reserved rent on the days and in manner aforesaid*

*(2) to pay all existing and future rates taxes charges and assessment duties and all other outgoings whatsoever which during the said term shall become payable in respect of the demised premises except such outgoings as are payable by the Landlord in the absence of special stipulations to the contrary*

*(3) to keep the glass of the windows and partitions and the interior of the demised premises and of all additions thereto and the interior and sanitary water apparatus thereof in good and tenantable repair and condition damage by fire or tempest excepted*

*(4) not to make or permit to be made any alterations in the construction or arrangements of the demised premises without the previous consent in writing of the Landlord nor without the like consent to cut alter or injure any of the walls timber or floors of the premises*

*(5) to paint with two coats at least of good oil paint in the Sixth year of the said term all the inside wood and ironwork of the demised premises and any additions thereto and after each internal painting to grain varnish distemper wash stop white and colour all such parts as have previously been so dealt with and to repair with suitable paper of as good quality as that in use at the commencement of the tenancy the parts usually papered*

*(6) to permit the Landlord and his agents with or without workmen and others at all reasonable times to enter upon the demised premises and to view the condition thereof. And upon notice being given by the Landlord to repair in accordance with the provisions of these presents*

(7) *not to do or suffer to be done on the said premises anything which will cause the Insurance Company to discontinue the existing Insurance on the demised premises or the building of which they form part or whereby the Insurance of the said building may be rendered void or voidable or the premium or premiums increased and to pay the excess of any Fire Insurance premium which may be charged on the building of which the demised premises form a portion at a higher rate than Five Shillings per One Hundred Pounds*

(8) *to use the demised premises for the purposes only of a retail provision store and in particular not to sleep or suffer anyone to sleep on the demised premises or use or permit the use of the same or any part thereof for residential purposes*

(9) *at all times during the three calendar months immediately preceding the determination of the tenancy to permit the Landlord or his agent to affix upon any part of the premises a notice for re-letting same and during the same three months to permit intending tenants and others with written authority from the Landlord or his agents at reasonable times of the day to view the premises*

(10) *not to assign underlet or part with the possession of the demised premises or any part thereof without first obtaining the written consent of the Landlord which consent shall not be unreasonably or arbitrarily withheld*

(11) *to yield up the demised premises and additions thereto at the determination of the tenancy in good and tenantable repair and condition (except as aforesaid) in accordance with the covenants hereinbefore contained*

*THE LANDLORD hereby covenants with the Tenant as follows—*

(1) *the Tenant paying the rent hereby reserved and observing and performing the several covenants and stipulations herein on his behalf contained shall hold and enjoy the demised premises during the said term without any interruption by the Landlord or any person rightfully claiming under or in trust for him*

(2) *to keep the exterior of the demised premises and of all additions thereto (except the glass) in good and tenantable repair and condition*

(3) *to paint with two coats at least of good oil paint in a workmanlike manner during the Third or Fourth year of the said term all the outside wood and metal work of the demised premises and other external parts usually painted and any additions thereto*

*PROVIDED ALWAYS and it is HEREBY AGREED AND DECLARED as follows—*

(1) *if the rent hereby reserved or any part thereof be unpaid for Twenty-One days after becoming payable (whether formally demanded or not) or if any covenant of the Tenant's part herewith contained shall not be performed or observed or if the Tenant or in the case of the assign of the Tenant not being a Corporation shall become bankrupt or make any assignment for the benefit of or enter into any arrangement for compensation with his creditors then and in any of the said cases it shall be lawful for the Landlord at any time thereafter to re-enter upon the demised premises or any part thereof in the name of the whole and thereupon this demise shall absolutely determine but without prejudice to the right of action of the Landlord in respect of any antecedent breach of the Tenant's covenants herein contained*

(2) *in case the demised premises or any part thereof shall at any time be destroyed or so damaged by fire or tempest as to be unfit for occupation or use then and in such case the rent hereby reserved or a fair and just proportion thereof according to the nature and extent of the damage sustained shall cease to be payable until the said premises shall have been re-built and re-instated and rendered fit for occupation and use. If any dispute shall arise between the*

*Landlord and the Tenant with regard to the amount of the abatement so to be made in the said rent or the period for which the said rent or any part thereof shall be suspended the same shall be referred to arbitration under the Arbitration Act 1889 or any statutory modification thereof for the time being in force*

*IN WITNESS whereof the Landlord and the Tenant have hereunto set their hands and seals the day and year first hereinbefore written*

*SIGNED SEALED AND DELIVERED by the said THOMAS BROWN*

*SIGNED SEALED AND DELIVERED by the said WILLIAM HENRY WILSON*

equipment and fittings to set up an engineering shop with a foundry would be very great, whereas the alterations and additions necessary for the putting in of sewing machines for a blouse or shirt factory, and the necessary electric or oil power for the running of such machines, would be comparatively a small matter. Something will be said on these points when dealing with fixtures generally.

## CHAPTER II

## BUYING A PROPERTY

THE popular impression with regard to buying premises, either for business purposes or for residence, is that the legal expenses incurred are very high. This, however, is wrong. It is impossible to purchase without the assistance of a solicitor, and a consideration of a purchase deed would, to the layman, be so much wasted time. Where the property is freehold or leasehold, not mortgaged or otherwise charged, and the vendor is the true owner holding a clear title, it is not always necessary to employ a solicitor; the vendor's solicitor is usually quite willing to act for the purchaser. Independent legal advice should be obtained where undertakings are required from the purchaser and the nature of these undertakings is in any way doubtful, and the same rule applies where the property purchased is held under a doubtful title.

### Cost of Purchasing.

As an instance of the cost of purchasing premises held on a lease for 99 years, granted in 1880, the following statements of account are interesting—

JOHN BROWN, Esq.
TO
SIMS & SYMES

*Re* WAREHOUSE, MARKET STREET, EXMINSTER.

| 19__ | | £ | s. | d. |
|---|---|---|---|---|
| Apr. to June | To Professional Charges relating to investigating title, preparing Assignment to you of the above premises and completing matter (Purchase price, £400) . . . . . | | | |
| | Half Scale fee . . . . . | | 3 | – – |
| | *Disbursements.* | | | |
| | Paid Stamps on Contract and Assignment . . . . . | 2 | – | 6 |
| | Paid Fee for registration with Lessor's Solicitors . . . | | 10 | 6 |
| | Paid Insurance Premium | | 15 | – |
| | | £3 | 6 | – |
| | | | 3 | – – |
| | | | 3 | 6 – |
| | | | £6 | 6 – |

CASH ACCOUNT

JOHN BROWN, Esq.
IN ACCOUNT WITH
SIMS & SYMES.

| 19__ | | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| June | Purchase Money, Warehouse, Market Street, Exminster | | | | 400 | – | – |
| | *Deduct*— Ground rent from 25th March 19__ to 18th June, 19__, at £12 10s. per annum . . | 2 | 18 | 2 | | | |
| | *Less* Tax . . . . | | 17 | 5 | 2 | – | 9 |
| | | | | | 397 | 19 | 3 |
| | Deposit paid by you . . | 40 | – | – | | | |
| | Cheque for balance of purchase money . . . | 360 | – | – | | | |
| | Our Professional Charges and disbursements herewith(above) | | | | 6 | 6 | – |
| | Balance down . . . | 4 | 5 | 3 | | | |
| | | £404 | 5 | 3 | 404 | 5 | 3 |
| | By Balance down . . | 4 | 5 | 3 | | | |

*E. & O.E.*

John Brown, the purchaser, has not employed legal assistance other than the vendor's solicitor, to whom he paid, on signing the contract to purchase the warehouse in Market Street, Exminster, a deposit of £40, being 10 per cent of the purchase money agreed upon. A scale of fees is laid down for work executed by solicitors, and it is usual for the solicitor acting for both parties to charge the purchaser half fees; in this case, as the amount of charges shows, the half scale fee is £3. The stamp duty on the deed conveying the property to John Brown is £2, and on the original contract note a stamp value of 6d. was placed. The leasehold owner evidently held on a lease which required transfers to be registered with the lessor's solicitors, who are entitled to a fee of 10s. 6d. for registering the particular transfer to Mr. Brown. The lease no doubt provides for the insuring of the property, and the purchaser's solicitors have taken out a policy on the premises, the premium being 15s. This makes charges and disbursements amount to £6-6s.

Still more information can be obtained from a study of the Cash Account. The purchase money is evidently £400, to be paid by Brown. The premises are held subject to the payment of a ground rent of £12 10s. per annum, and as Brown does not obtain possession until the 18th of June, the proportion of ground rent from quarter day in March to the date of *actual* ownership by Brown is payable by the vendor. This proportion is reduced by Income Tax on the amount; an explanation of the principle of stopping the amount of Income Tax out of payments of ground rent is explained in a section on Income Tax (*q.v.*). The total amount to be paid by the vendor is £2 0s. 9d., and instead

of paying it he allows it as a deduction from the purchase money, leaving Mr. Brown to pay the whole quarter's ground rent, less tax, on June quarter day.

The two columns of the Cash Account show payments made and balance due to Messrs. Sims & Symes, and amounts originally due as purchase money and charges. A cheque for £4 5s. 3d. to the solicitors clears all liability on the transaction, showing that an out and out purchase of a long lease is hardly more expensive than a seven years' lease of the same premises.

## CHAPTER III

## LEASING BUSINESS PREMISES

As leasing of premises or tenancy in some form or another is the commonest form of trade holding, more particular attention is paid to this aspect of securing business premises. The simplest way to approach this matter is to set out a form of lease for a retail shop, part of larger business premises, and to examine the document clause by clause. This is generally a matter for legal advice, and it may be that a preliminary agreement is entered into before the lease is drawn. In such preliminary agreement the parties may make what terms they wish, and these will be embodied in the lease. If no preliminary agreement is made but a bare undertaking to let and to take on the part of the landlord and tenant respectively, the clauses a lease may contain are limited to what the law considers as "usual," and only a lawyer can properly advise on this point.

In the absence of a special agreement, the solicitor of the landlord prepares the lease at the cost of the lessee, and the lessor pays for a copy, which is called the counterpart. The landlord's solicitor does not recover his costs from the tenant but from his client, who, in turn, can recover from his tenant.

We will now set out a lease, not as a model of the lawyer's craft, but an actual document under which business premises have been let for a term of seven years.

### Rent.

A reading of the lease, a difficult matter to the layman owing to the absence of punctuation marks, which in a legal document are often omitted, will show clearly the rent payable by the tenant, in this case £100 yearly paid quarterly, but not on the customary quarter days. Rent is always a certain definite amount, or an amount that may be easily ascertained. In a famous case the payment depended upon the number of looms run during a given period, on the same principle as in mining leases on the number of tons of mineral worked.

Rent is not payable in advance unless there is an undertaking to so pay, and it is *not* wise to pay in advance in the absence of the special agreement seen in our lease. Payment in advance is looked upon as a loan, the loan to be discharged by the landlord paying himself at quarter day, so that if the property changes hands during the quarter, rent may be demanded again by the new landlord. In the absence of a lease, an agreement to pay a yearly rent indicates a yearly tenancy, and it is a point not affected by quarterly or monthly payments; as, for example, "£60 per annum payable at £5 monthly on the last day of each month," points to a yearly tenancy. Under the lease, the term ends at the end of seven years, and no notice is required to terminate the tenancy; but in the case of a yearly tenancy, a half-year's notice (183 days) terminating on an anniversary of the commencement is required. In trade tenancies, the usual quarter days are not observed so frequently as in domestic ones, but when a trade tenancy commences on a quarter day it will terminate on the same quarter day in any year by the giving or receiving of the previous two quarters' notice, although the time may not, as measured in days, be half a year. In the case of a tenancy commencing 25th March which is terminated by giving notice on 29th September to leave on the following 25th March, the two quarters amount to 177 days only. To return to our lease, we find that the landlord has the right to enter and bring the tenancy to an end if the rent is not paid within twenty-one days of any of the "rent days" agreed upon. The termination of the tenancy does not deprive the landlord of his right to recover the rent due either by distress or by an action in a court of law.

### Distress.

The right to enter on the premises and to seize the goods of the tenant for rent due and unpaid is one of the examples of self-help which are few in English law. The right must be exercised on behalf of the landlord by a bailiff, that is a person certificated by a County Court. Distress by an uncertificated person is illegal. The steps taken are *entry*, which must not be forcible, but by ordinary means of entry by the door; *seizure of goods* sufficient to meet the claim; *impounding*, or taking the goods into legal custody. In reality, seizure on enclosed premises covers impounding. The bailiff is then to give *notice* of the goods required by means of an inventory, and he may not keep the tenant out of the premises. Finally, if the rent is not forthcoming, the *goods* may be *sold*. Five clear days must pass after notice of the distress has been given before a sale can take place, and the tenant may ask in writing for an extension of ten days. The goods may be sold on the premises, but if the tenant will pay the expenses of the removal, they may be sold at the

rooms of the auctioneer, who must obtain the best price he can. The landlord has no right to the goods, and he may not buy in at the sale, so that the old-fashioned covetous landlord of fiction could not distrain for the purpose of securing for himself the antiques of his tenant.

Any goods, furniture, etc., on the premises may be seized by way of distress for non-payment of rent, unless they are privileged. Fixtures, including machinery firmly fixed, may not be removed, as they are absolutely privileged. Where goods seized could not be restored in the same condition, as, for example, loose machines with partly worked materials attached, goods of a perishable nature, as milk, butcher's meat, and the like, where goods have been delivered to the tenant who is exercising a public trade, such goods are immune if they are delivered to be carried or worked upon in the course of his business, as, for example, cotton piece goods in the hands of a bleacher could not be seized by the bleacher's landlord where rent was unpaid. In the same way, goods entrusted to a carrier, a pawnbroker, or an auctioneer are privileged. If goods are actually in use, seizure might cause a breach of the peace and, in consequence, the law puts such goods outside the scope of distress. The foregoing are instances of absolute privilege, and there are still cases in which there is a partial privilege. Thus, textile machinery is exempt from distress unless it is levied by the owner of the machine. Railway rolling stock on sidings belonging to a tenant who has not paid his rent cannot be seized unless it can be shown to belong to the tenant. Finally, the tools and implements of a man's trade are absolutely privileged if in actual use, or to the extent of £5 in value, and they are subject to a qualified privilege so long as there is other property sufficient to satisfy the landlord's claim. The books of the business are also probably immune from distress.

## Outgoings Generally.

Turning to No. 2 of the covenants or undertakings given by the tenant, we find a comprehensive agreement which aims at giving to the landlord the clear rent of the property. The expression "rates, taxes, charges and assessment duties and all other outgoings," is a wide one and secures the landlord against any deduction from his rent save property tax and tithe rent charge, which may always be deducted from the rent by the tenant, in spite of the fact that these charges are assessments. The intention of the undertaking is to cast on the tenant all public charges on the premises. It is not an unfair thing, as it is a contract between two persons of sound mind and of full age; but it is well for the tenant to realize what it really means.

The law relating to the tenant's liability for public demands in respect of the property is confusing and difficult, but where in an agreement he undertakes to pay "charges," or "duties," or "impositions," or "outgoings," he makes himself liable to every public charge in the way of rates, paving charges, drainage expenses, or the like that may be levied upon his premises in respect of work done for the benefit of his own and the adjoining property also, as well as expenses in relation to the demands of the public authority on account of matters relating to the particular premises, as, for example, renewal of sanitary equipment.

There is ground for expressing the opinion that such a clause in a yearly tenancy would not have so wide an effect, and certainly the nature of the work to be done on the premises would be considered. Thus, if a demand were made on the landlord to take down the front of his premises because it overstepped the building line, the burden of re-building could not be cast on the tenant.

# CHAPTER IV

# RATES

THE trader or manufacturer, having chosen his premises, is called upon to pay the rent and rates irrespective of success or failure. These are standing charges which become less burdensome as the volume of business done increases, but rates, unlike rent, are subject to fluctuation, according to the requirements of the local public services.

The care of the poor, the upkeep of roads, the cost of police, the education of our youth, are matters with which the local governing authority are charged, and for the purpose of meeting the whole or part of the expenses connected therewith, they are entitled to call upon the occupiers of dwellings and business premises in their area to contribute. The basis of the contribution to be made is the "net annual value" of the premises or workings occupied.

The numerous local services are all financed from one or other of the Poor Rate, Borough Rate, or General District Rate. The Poor Rate is the oldest form, and is still levied under a very old Act of Parliament passed in the reign of Elizabeth. More modern Acts regulate assessments and collection of rates, and the assessment of the Overseers is on the *net annual value*, that is, on *the rent at which the property* assessed *might* reasonably be expected to *let from year to year*, free from all tenant's rates and taxes, *with a deduction for* the average cost of *repairs*, insurance, and other expenses necessary to keep it in condition to command such rent. These deductions, sometimes called *statutable deductions*, vary with the kind of property, its age and state of repair, and there is a variation from town to town, ranging

from 5 per cent to 30 per cent. There is no recognized scale of deductions as in the case of Income Tax (*q.v.*), which allows for one-sixth for repairs.

## Valuation List.

In preparing assessments, a Valuation List is made out showing the gross estimated rental and the rateable value, or "net annual value," of each property in the area. The occupier of the property receives a Demand Note showing the rateable value only. He is entitled to see the Valuation List, and he should find out for himself the figure put down for gross annual rental. He will be able, if he keeps proper books, to check the deduction allowed, and if he feels that he is penalized he has the right to appeal. In theory, he is entitled to the cost of repairs to the buildings and machinery covered by the assessment, all insurances on them, and to a "sinking fund to replace the capital" expenditure on them where they are properties with short lives, as, for example, machines which wear out quickly.

If the landlord does repairs and maintains the premises, no deduction is allowed, and similarly where a tenant has a repairing lease the theory is that he pays a smaller rent by reason of his extra burden, and, consequently, the deduction will be less; indeed, the rent in this case is the net annual value as a rule.

## Assessments.

The assessing of shops is a simple matter, as rent is the basis, but factories and workshops raise more difficult questions. Rating is based on land, but in English law all that is built on the land or otherwise permanently attached, is part of the land, increasing its annual value and so increasing the rent it would yield in its improved condition. Consequently, these matters must be considered in the rating of workshops and factories. In addition to the rent of the land, the premises and their *attached* contents must be valued and allowed for. This calls for expert valuation, particularly where rent is not paid, the occupier being owner.

Machinery, as machinery, is not rateable, but in so far as it improves the value of the premises it increases the rateable value. Tenants' machinery stands on a different footing to landlords' machinery, but even tenants' machinery, as increasing the profit-earning capacity of the business, is taken into account. The basis of the assessment is usually a percentage, say about 5 per cent, of the capital value of the land, a slightly larger percentage of the capital value of the buildings, and an agreed percentage of the value of the boilers and fixed plant installed. The total is taken as the rent a possible tenant would be willing to pay. Similar works are taken into account, and such matters as the age of buildings and plant, and the position of works in relation to public services, as transport and lighting, are likely to affect the rateable value.

## Appeals.

The right of appeal from an assessment is valuable to a business man. He may appeal to Quarter Sessions, but the procedure is to appeal to the Assessment Committee, and from them to Quarter Sessions. Notice of appeal must be given to the Overseers, and to the Union Assessment Committee appointed by the Guardians. All points of objection should be set out in the notice, as only points mentioned in the notice of appeal can be considered. If the deduction allowed is too small, and it is desired to draw attention to inequality as compared with similar premises, this must be set out, or it cannot be raised in Court, and even the Assessment Committee may reject the evidence tendered on this point. In the event of appeal, it is well to make all possible objections; but where the gross value is apparently low, it is wise to rely only on inadequate deduction as a ground of appeal, since, unless the appeal raises objection to the gross value, the figure will not be interfered with—on the other hand, it may be re-assessed *on the up grade* if appealed against.

Rates are demanded in advance, generally for half a year, but in some districts for the whole year. If they are not paid, a demand in writing is made, and at the end of fourteen days a summons can be obtained for the defaulter to appear before justices to show cause why the rate should not be paid. The summons must be issued within six months of the demand. The Court makes an order for payment, and distress on the defaulter's goods follows if the order is not obeyed. In default of goods, the person defaulting may be committed.

# CHAPTER V

# OTHER COVENANTS IN THE LEASE

RETURNING to the lease given in Chapter III, we find several undertakings in relation to the condition of the premises given by the tenant to the landlord. These undertakings are contained in Clauses 3, 4, 5, 6, and 11.

## Repairs.

Clause 3 is a general covenant to repair and keep in repair the premises throughout the seven years' agreement. Clause 4 is an undertaking "not to commit waste," which is the technical term forbidding structural alterations or permanent damage to the property. Clause 5 is a practical agreement setting out in definite terms

what the tenant must do in order that the premises shall be delivered up at the end of the tenancy in as good condition as when they were taken. As the agreement to repair is an undertaking to keep in repair throughout the tenancy, Clause 6 gives to the landlord the right to see for himself that the undertaking is properly carried out.

Where there is no definite agreement as to repairing, the tenant is under an obligation to use the premises in a tenant-like manner. What this means is rather difficult to define, and, consequently, landlords generally insist on an express undertaking. Without any agreement a tenant would be liable for injury to walls, timber, and floors, and in any event, without a definite contract, substantial repairs and the making good of wear and tear could not be expected. A tenant expected to keep property in good "tenantable condition" is not required to place the property in that condition which would be required by a new tenant, but he must keep it as a reasonable man would keep his own property. On the other hand, there is no obligation on the landlord to do any repairs unless he has agreed to do so.

If you give an undertaking to keep in repair the shop or premises you take, you must bear in mind that it will be necessary for you to put them into repair first of all, unless you have made a bargain with the landlord to do this before you enter. In such a case, the undertaking to keep in repair depends upon the landlord carrying out his bargain. The amount of repair you would be expected to do will depend upon the age, the class of the property, and its condition when you take it. If premises are taken and are found to be in a dangerous condition, the tenant cannot evade his obligation on this account, and he cannot call upon the landlord to make good the defect unless there is an agreement by the landlord to give the premises in a condition suitable for the tenant's purpose.

Clauses 2 and 3 under the head of "Landlord's Covenants" in the lease inset are undertakings given by the landlord that he will do outside repairs. Clause 3 indicates the extent of these repairs. It will be seen that the duty of repairing under the lease is a joint one, the tenant doing the inside and keeping glass in good condition, and the landlord undertaking the care of the outside of the premises. The tenant should protect himself in this case by taking out a plate-glass insurance policy, since he is liable to make good all breakages.

## Repairs and Third Parties.

Duties towards the public and towards customers and others using your business premises are imposed by law. If a guest comes to the house of his friend, he is expected to take the reasonable risks that his friend takes. He has no claim for injury if a pane of glass, believed to be safe, falls and injures him, or if he slips down a step of which he was unaware. In the case of trade premises, the rule is different. If a customer or any person on lawful business enters on business premises, he is entitled to expect that the premises are safe, and any injury due to want of repair, hidden traps or defects in the structure must be compensated for, whether the injury is received whilst doing business or whilst entering or leaving the premises. The *occupier* is the person responsible. Apart from the case of customers, the general public must be considered, and if a person is injured by any part of business or other premises breaking away he has a right to damages. The occupier is primarily liable, but where the landlord has agreed to do outside repairs the liability is shifted to him. The rule inside is different, and even if the landlord is required to do inside repairs, *the occupier is responsible for injury due to inside defects*, although where there is an agreement binding the landlord to do inside repairs, *the tenant* may recover compensation from the landlord.

The landlord is directly liable when he commits a public nuisance by allowing the premises to be in a ruinous condition, and he can avoid liability if the tenant has given an undertaking to repair.

## Insurance.

Clause 7 in the undertakings given by the tenant is easily understood if the reader considers its effect. The landlord pays a maximum rate of 5s. per £100 premium on the whole building let, and he does not desire to pay more. When a policy for fire insurance is taken out, the premium payable depends on the trade carried on. Obviously, there is less risk in the case of a butcher's shop than in an oil and colourman's business, but suppose the two trades are housed under the same roof, the greater risk extends to both businesses. It is therefore a rule that where a building is occupied by several tenants, the business which is most risky governs the premium paid on the premises and also the premiums on the contents. Thus, a trader in his own premises carrying on a business in which the risk is measured by 2s. 6d. per £100, may find that the insurance company requires 15s. per £100 when he occupies premises jointly with other people carrying on a risky business. Again, the coming of a new tenant may raise premiums all round for other tenants, and the landlord wishes to protect his tenants. In the present case, if the business of the tenant causes increased premiums to be demanded, anything over 5s. per £100 is payable by the tenant, and afterwards the tenant must do nothing to cause a further increase.

The tenant will, of course, cover his stock and other contents of the premises, the insurance referred to in the lease being that of the premises

only, although the rate on the building generally turns on the trade carried on.

If an office is rented under the same roof as a warehouse for cotton goods, the rate for the office, which might otherwise be 2s. 6d., will be perhaps 7s. 6d.

## Inhabited House Duty and Business Premises.

Clause 8 is intended to prevent the use of the premises for purposes for which they are not intended and not fitted, and also to avoid the possibility of their becoming chargeable to Inhabited House Duty. House tax is regulated by various statutes, the foundation of which is the House Tax Act of 1851. We must go further back for the law which brings certain business premises within the scope of House Duty, for a rule under the House Tax Act, 1808, provides that all shops and warehouses which are attached to a dwelling-house, or have *any communication* with a dwelling-house, shall be valued with the house for purposes of House Duty. There are certain exceptions, but these apply chiefly to warehouses on a wharf, and warehouses which are distinct from the dwelling-house to which they are attached, and are solely used for "lodging goods or carrying on a manufacture."

In taking combined premises, the business man would do well to have this liability in mind. If a tradesman takes a lock-up shop, this, as business premises, is usually exempt, but if it is attached to the flat above, and has any communication therewith, it will be included in the assessment of the flat for purposes of Inhabited House Duty. The communication in question does not necessarily mean a door or passage. Some forty years ago a case came before the Courts in which bank premises were concerned. The bank occupied the ground floor and the upper floors were used as a dwelling-house by a bank official. There was no internal communication; each part had its own outside entrance, but the bank official was able to control the bolt of the bank safe from his own premises. In this case it was held that the communication was sufficient to charge the *whole* premises as an inhabited house.

Suppose a tradesman gradually builds up a business, taking one shop after another and opening one into the other. His annual value is gradually increasing. Should he house any of his staff in the flat above the end shop, having communication with the end shop, this shop in its turn communicating with the next and so on, he may find himself liable to House Duty on the whole.

Business premises as such are exempt from this tax, and this fact, in conjunction with what is stated above, makes the question hopelessly complicated. If any attempt is made to charge this tax on business premises, it is well to take expert advice before disputing the matter.

Where a house is occupied for business purposes only, it is exempt, and the fact that a servant lives on the premises as caretaker will not make the premises chargeable. This exemption is made solely for the protection of the premises.

## Agreement not to Assign the Premises.

In the earlier part of the chapter on the taking of premises, a suggestion was made that the lease to be taken should be reasonably long. It was pointed out that security of tenure was essential to the well-being of a business. It should be remembered that in any lease granted for either business or residential purposes, the landlord will require an undertaking against assigning or sub-letting without his consent in writing. Clause 10 in the skeleton lease contains such an undertaking. The object of this is to prevent the tenant from providing the landlord with a new tenant who may be objectionable to him.

If the tenant assigns in face of the clause in the lease, and no consent has been *asked for*, the landlord can enter on the premises and terminate the lease under the provision at the end of the lease. If there is no undertaking against assigning or sub-letting, the tenant may exercise the right. If there is a covenant of the kind, the lessee *must ask* for consent. Once he has asked for consent, and the consent is unreasonably withheld, he may assign or sub-let without consent.

# CHAPTER VI

# FIXTURES

The subject of fixtures occupies an important place in the consideration of any tenancy, but more particularly is this the case with regard to business premises. Under this head, the right of removing articles which have been attached to the premises will be discussed. Popularly, the word "fixture" is most loosely applied, and may indicate anything that is in even the slightest degree attached to the premises. In reality, the word should only be applied to those articles, or, as they are called, "personal chattels," which are so attached to the premises as to form part and parcel with the land upon which the premises stand. It is with the wider sense of the word that the business man is concerned, and as a tenant he often attaches or finds attached to the premises articles so attached for the more convenient use of the premises for his particular trade, and, in the case of retailers, for purposes of ornament and convenience. The manufacturer seldom troubles about ornament, but trade and convenience predominate.

Where articles are not attached in the legal

sense, no question arises as to their removal at the end of the tenancy, as, for example, gas fittings, globes, electric light bulbs, and the like. Where, however, there is a material connection, as in the case of engines, boilers, plant attached to a foundation, fire-places, counters, wooden shelving, partitions, sheds, and other out-buildings, and similar articles, another set of considerations arise. The lease or other agreement may, but usually does not, make special provision for the removal of such things where they have been provided by the tenant, or, on the other hand, their removal may be specially prohibited by the terms of the lease, as where the tenant arranges to give up the premises together with fixtures in good repair at the end of the tenancy. If no such provisions occur, the rule is that where they have been attached for the purposes of trade or of agriculture, or for mere ornament and convenience, they may be removed by the tenant. To take advantage of this rule the tenant must have put up the fixture himself *during* his tenancy, in order that he may have the right to remove it *before* his tenancy is completed.

## Landlord's Fixtures.

The distinction sometimes drawn between "landlord's" and "tenant's" fixtures is not a legal one, and is somewhat artificial. Anything added to the premises by the landlord and not the subject of a special agreement, becomes part of the premises, and if for the convenience of a tenant, a landlord is willing to place a counter across a shop, the tenant has no more right to remove that counter than he has to remove doors and windows, or to take the locks from the doors at the completion of his tenancy. The distinction is made merely for the purpose of indicating what the landlord himself has put in the premises, or what has become the property of the landlord by reason of a former tenant having left fixtures attached to the premises, and the expression "landlord's fixtures" has come to mean every article that for the time being forms part of the premises and is usually provided by the landlord. Tenant's fixtures are those things which are provided by the tenant, and which under the rule as to trade, ornament, and convenience, would be removable by him at the end of the tenancy if proper steps are taken.

## Fixtures for Trade or Ornament.

The tenant's right to remove articles placed on his premises for the purpose of their better enjoyment and application in his trade is a very old one, and is based on somewhat similar principles to those which caused us to suggest that a tenant taking premises for business should take them for the longest period which he feels he may chance with certainty. The privilege of removing erections and fittings used in trade is limited to things which are unsubstantial in character. Anything of a permanent nature, the removal of which would do serious injury to the fabric, must remain in position. The following kind of articles have been included under the head of "Removable Fixtures": colliery engines, stationary steam engines and boilers, sheds consisting of upright posts erected on a brick foundation, trees and shrubs in the grounds of a market gardener, glass houses erected by a market gardener, and these latter quite apart from the provisions of the Agricultural Holdings Act.

It is well established that a tenant may remove articles which he has affixed for the purposes of ornament and convenience. The right is narrower than the right to remove trade fixtures. For instance, whilst a shed, as described above, has been held to be removable as a trade fixture, a conservatory or glass-house not used for trade but for ornament, would not be deemed to be removable. The right to remove objects attached to the premises will depend upon the method used to attach the objects, and the physical injury which would be likely to result from removal. Cornices, window blinds, marble slabs, counters, shelves, and temporary woodwork attached by screws, are all removable. Similarly, stoves and grates, radiators, coppers, ovens and ranges, gas fittings, electric light fittings but not wiring, might be removed. Where, however, structural alterations have been made, as, for example, alterations in windows, shop fronts, and the like, the equipment used in such alterations being permanent in its nature, could not be removed. Mirrors forming an essential part of the whole scheme should be left behind, but where merely accessory to the window scheme or the scheme of shop decoration, they would be removable. As the question of fixtures does not arise until removal or end of the tenancy, it would seem to be a matter not necessary to be dealt with at this point. It is, however, a very serious consideration, and should be kept in mind when premises are taken, and alterations or additions taken in hand.

## Manufacturers' Fixtures.

Something has already been said about the undertaking or covenant to repair, and it is in this undertaking that restrictions may be placed on the tenant's right of removal. If the tenant undertakes that he will keep in repair the premises let to him, and yield up in repair at the expiration of the term, together with all fixtures belonging to the premises, he thus gives up his right to remove trade fixtures. He still retains the right, however, to remove anything that has not been affixed to the freehold. An agreement to deliver up the premises and all other erections and buildings would prevent the tenant from removing trade fixtures, hence it is an important matter that the wording of the covenant to repair should

be thoroughly understood. In one case an agreement "to yield up in repair the premises together with all erections, buildings, and improvements," prevented the removal of a plate glass front which had been erected in place of an ordinary shop window, and which was merely fastened to the fabric by wedges, the window being capable of being restored.

It is generally better to be quite clear as to the removal of fixtures by having a well-drawn and specific agreement as part of the lease, in which case the matter becomes one of contract and not common law. Usually, the agreement takes the form of a restraint rather than a permission to remove. A list of articles to be delivered up with the premises is set out, followed by the words: "and all fixtures and things fastened to the premises." These words are known as "general words," and the Court held in a case some 20 years ago that they did not include trade fixtures, and that trade fixtures were, therefore, removable in spite of the extent of the agreement regarding the condition of the premises to be delivered up to the landlord.

## Time for Removal.

We are dealing with the taking of premises, rather than with their up-keep or termination of the tenancy agreement, but it is well at this point to indicate that, as a general rule, fixtures may be removed from the premises only during the term of letting during which they have been put up. If a trader takes a lease of premises, and, during the currency of the lease, puts up fixtures which he might have removed at the end, if he wishes to renew the lease he must make a bargain for the future removal of the fixtures at the end of the renewed term. If he fails to do this, his right of removal is lost, as this right can only be exercised during the term in which the fixtures have been erected. If he continues in possession at the end of the tenancy without making any new agreement, the question is not so simple, and it is doubtful whether, after "holding over," he would, on leaving the premises, have the right to remove his fixtures. He certainly could not remove them if the landlord proceeds to eject him.

SECTION 3

# The Lighting of Shops, Offices, Warehouses and Factories

By J. S. Dow

CHAPTER I

## SOME NOTES ON SHOP WINDOW LIGHTING

THE contents of his windows form the merchant's most valuable source of advertisement, which is doubtless most effective during the hours when artificial light is used. Certainly a well-lighted window "stands out" more effectively at night than in the daytime. The period of artificial lighting ordinarily varies from an average of about 4 hours per day in winter to practically *nil* in mid-summer; but some firms make a practice of leaving the contents of their windows brightly lighted after closing hours—thus securing additional advertising value at a time when the streets are often filled with people, with more leisure to inspect show-windows than during the day. It is not absolutely necessary even to have an attendant on the premises to control the illumination, as lights can be extinguished automatically by a time-switch after a certain hour of night. As the lighting of a window of average size does not usually cost more than 6d. to 1s. an hour, this cannot be considered an expensive advertisement. A well-lighted shop window, like a "silent salesman," is always at work. There is no doubt that a thoroughfare with brightly lit windows attracts many people who might otherwise pass it by. Statistics accumulated in the United States have shown that people tend to migrate into the most brilliantly lighted streets.

### Window Dressing.

The lighting of a window, therefore, is as important as the system of dressing, and both should be considered conjointly. Where possible, the merchant should aim at displaying a few choice objects in his window, and allow plenty of space. When the entire window is crowded with objects brought quite close to the glass it is difficult to devise really satisfactory lighting. However, practice in this respect depends on the neighbourhood in which a shop is situated.

### Guiding Principle in Lighting.

Whatever be the method of window-dressing adopted, the guiding principle in lighting should be the same as that adopted on the stage, that is, the actual sources of light should be concealed from the view of people looking into the window, and every effort should be made to concentrate the light on the goods. The window, in fact, should be treated as a miniature stage. When a window is not over-filled with goods and has a definite "line of trim," concealed lighting can be practised with good effect. If the goods are distributed more or less horizontally, the lights may be arranged immediately overhead, equipped with reflectors throwing the light downwards, and shielded from the view of spectators by a light curtain. Some very tasteful effects have been secured by recessing the lights in an artificial ceiling, or by concealing them above panes of diffusing glass, forming an artificial skylight. But it more usually happens that the line of trim is an inclined plane sloping backwards and upwards. Hence, lights are more commonly distributed along the top edge of the window and mounted in inclined reflectors pointing inwards towards the goods. The tilt of the reflectors may require some adjustment to get exactly the right effect, according to the contents of the window. Adjustable fittings are now provided enabling this to be done. The choice of reflectors and spacing to get uniform distribution of light is of some importance, and merchants are usually well advised to make use of lamps and fittings supplied by a leading manufacturing firm, which will be prepared to give advice on such points. Opaque reflectors are commonly employed, and it is obviously economical to direct at least the majority of light into the window. But occasionally a certain proportion of the light from these lamps may be utilized to illuminate a curtain or fascia, bearing the name of the shop and descending a short distance below the top line of the glass.

### Crowded Windows.

When the entire window space is crowded with goods it is less easy to make effective use of the above methods. Lamps may have to be mounted amidst the goods near the window in order to get a uniformly bright effect. But if this method is adopted (and it should be avoided if possible),

the sources should always be screened from the view of people on the pavement. This can be readily done by mounting in front of them translucent name-plates containing lettering drawing attention to the contents of the window. If executed in opal glass, such signs will reflect a

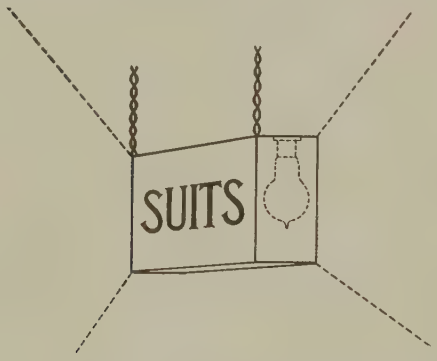


FIG. 1

Illustrating type of Box Sign suitable for use in show windows when lamps have to be used in positions where they would otherwise cause glare.

certain amount of light back into the window, though they are naturally not so efficient in this respect as scientifically designed reflectors. Apart from the annoying "glare" to which the presence of unscreened filaments of electric lamps gives rise, the use of lamps in this way is very wasteful. But a small proportion of the light produced is used for its legitimate object, i.e. illuminating the goods. Most of it passes out through the window into the eyes of persons on the pavement, to whom it is distinctly annoying. Consequently, in order to produce a sufficiently brightly-lighted window, more electricity will have to be consumed than if proper methods of shading were used.

## Gas Lighting.

The above remarks, while relating specially to the exhibition of unscreened filaments of electric lamps, also apply to incandescent mantles, which should also be shaded. There are now available a much greater variety of well-designed gas lighting fittings than could be obtained a few years ago, the compact vitreosil glassware being particularly serviceable. The fundamental principles of good window lighting should, therefore, be complied with equally well when gas lighting is used.

## Backgrounds.

A hint of some value to merchants may here be given. The background of show-windows should be selected with care. Highly polished glass or other shiny material is usually objectionable, as images of light sources are apt to be reflected, and these may be almost as troublesome as if the actual sources of light were exposed. The background should be of some matt material, preferably in the form of a curtain which can be removed during the day-time if desired. For the purpose of diffusing the light, it is better to use surfaces that are light in colour rather than very dark ones; nevertheless, one must recognize that the nature of the background is partly determined by the goods. One would hardly use a white background during a "white sale," though it might prove quite serviceable if dark objects, such as boots and shoes, are being displayed.

## Amount of Light Required.

The amount of light necessary for a window naturally depends both on the background and on the reflecting power of the materials. Very dark cloth, which may reflect only 10 per cent or less of the light reaching it, needs a stronger illumination than do such materials as white linen, which may reflect 80 per cent of light. Hence, in the interests of economy, some flexibility of lighting is useful. The lamps should be completely controlled by switches so that the amount of light used can be adjusted according to the nature of the display.

It is somewhat difficult to state the exact amount of light required without going into technicalities. But a brightly-lighted window will usually receive 10–30 foot-candles,[1] which is about five times as much light as one would usually find on the dining-room table in the home.

Such an illumination might require about $\frac{1}{2}$ to $1\frac{1}{4}$ watts per cubic foot of space illuminated. This (with electricity at 6d. a unit) might work out to about 2d. to 6d. per cubic foot of space per year, assuming that the lamps burned for about 700 hours during the entire period.

Provided that the lights are well shielded and the light is directed on to the goods, it is scarcely possible, with ordinary expenditure of gas or electricity, to over-illuminate a window. A very brightly lit window, with an attractive display, will draw people right across the road, whereas they would hardly pause for a dimly illuminated interior. Many merchants consider that powerful outside lamps are also necessary to attract custom from afar. The appeal of such lamps is, however, much less now than it used to be, because they are so common. It is better to try to attract notice by some ingenuity in the shading of the lamps, by the use of pictorial advertisement signs, and by some novel colour combination. In any case, if bright lights are used they should be kept fairly high up, out of the range of vision of people looking into the windows; that is, the objects of attracting custom from afar and illuminating the goods for the benefit of the customer who has

[1] *N.B.*—A "foot-candle" is the illumination produced by a source of one candle-power at a distance of 1 foot from the surface illuminated.

arrived, should be kept distinct. During recent years gas companies have made a feature of parade-lighting, i.e. the installation of rows of bright high-pressure gas lamps, supplied from the public mains, but charged to the consumer at agreed rates. There is no doubt that a stretch of roadway so illuminated attracts attention. Yet it should not be too glaring, and the effect is better when the lamps are screened with opal glass globes or vitreosil cups of the type recently introduced by progressive gas companies.

controlled from a distance. Thus, the shop-keeper can light up and extinguish outside lamps from the inside of his shop—a convenience that is much appreciated during hours of busy trade.

## Co-operation of Shops.

A series of shops, the owners of which contemplate adopting parade-lighting, could often improve the general effect by taking counsel together, and the same even applies to the inside window lighting. If each shopkeeper is a law

FIG. 2

A TYPICAL VIEW OF A SHOP WINDOW LIGHTED BY CONCEALED LIGHTS ALONG THE TOP

## Arrangement of Gas Lamps.

Consumers who adopt gas lighting will usually be well advised to have their lights maintained by the local gas company and seek their advice on the arrangement of their lamps. It is false economy to continue using obsolete burners, when much better results can be obtained with the latest inverted types. There has been much progress in the design of globes and shades for use with both low and high pressure lamps during recent years, and also in methods of controlling the lights. An important step has been the introduction of special cocks which enable the lamps to be

unto himself, the result is usually that some shops are eclipsed by neighbours who adopt extremely brilliant lighting; a really well-lighted and skilfully contrived lighting display may be "killed" by the misguided excessive "glare" of shops on either side. But if some common agreement as to the methods of lighting could be reached, the effect would often be more pleasing to the public and less expensive to the merchant.

## Illuminated Signs.

The same applies to the use of illuminated signs, the value of which is hardly sufficiently

appreciated, except in certain districts. Illuminated signs are of several distinct types. The massive flashing types, utilizing pictures or lettering outlined in incandescent lamps are probably only suitable for large premises, and are expensive. But the pictorial types more recently introduced are worth attention, even by small shopkeepers. These signs consist of pictures painted in colour on translucent linen, and illuminated by a few lamps placed behind them. The appeal to the public is based on the striking appearance of the illuminated picture, not on mere brilliancy. Such signs are comparatively cheap in running cost, and their initial expense could be considerably reduced if shops of a certain trade would agree upon a distinctive sign that could be made in quantity. Barbers, for instance, might adopt an easily recognizable sign, filling the same purpose as the board signs customary in the past; similar distinctive illuminated indications of trade might be adopted by bakers, tobacconists, drapers, etc. Anyone passing along the brilliantly lighted thoroughfares of to-day will agree that it is not always easy to pick out the shop one wants when one is in a hurry, especially when the frontage is liberally sprinkled with bright unscreened lamps.

There are many other types of illuminated signs which are extremely useful as a supplement to concealed window lighting, but are apt to be "killed" by the exposure of very powerful lamps in their vicinity. Amongst these may be mentioned the types, useful for hanging in the window, which consist of glass plates with a tubular electric lamp concealed along the top and bottom. If the glass plates have appropriate lettering or designs stencilled on the back, this appears to be brilliantly lighted by the rays which enter the glass plate and stands out with a transparent background, through which the contents of the window can readily be seen. Effective colour contrasts, which can be altered at will by some form of flasher, have recently been introduced. There are also available small box-signs, the face of which consists of translucent material illuminated from behind. These can also be used to draw attention to the contents of the window. Finally, there are the new "Osglim" neon lamps, which constitute a distinct novelty and are particularly well adapted

FIG. 3

In this case the interior is flooded with light and the illumination of the showroom also serves to enable the contents to be seen through the window.

to the formation of letter-signs. The light from these lamps is derived, not from a metal filament, but from glowing neon gas within the bulb. If one of the electrodes is made in the form of a letter, it becomes coated with a layer of this orange-coloured light, so that a row of such lamps can be used to spell out any desired notice. As each of these lamps consumes only 5 watts (about one-quarter of the consumption of electricity of the smallest filament lamp suitable for 200–240 volts), signs composed of them are evidently economical in current consumption. Although the light furnished by such a lamp is not great, its peculiar orange-red colour makes it stand out and attract attention—provided the surroundings are not unduly bright. There are many other devices that can be included in the contents of the window in order to attract notice. The writer can recall, for instance, a dummy jar of marmalade, placed amongst a heap of such jars and indistinguishable from them when lighted from in front. But the dummy contained a lamp operated by a flasher, and being composed of translucent coloured material, shone out at intervals, inevitably catching the eye of the prospective customer.

Enough has been said to indicate some of the problems that deserve attention from the merchant of to-day. The aim has been to show that success in lighting does not necessarily depend upon expensive outlay. Now that light is so abundant mere brilliance has not the compelling power that it once had. If the owner of a shop can hit upon some novel arrangement of light, or some peculiar or exceptionally pleasing colour combination, this is much more effective than a mass of very powerful lamps, consuming a great deal of gas or electricity and perhaps used in such a way as to dazzle the eyes of the customer—to startle rather than attract

## CHAPTER II

# THE LIGHTING OF SHOP INTERIORS, WAREHOUSES, ETC.

In the lighting of interiors of shops the advertising aspects of illumination should not be overlooked. The aim of an up-to-date merchant is to establish a permanent relation with his customers, not to be dependent on casual passers by. Nothing is more helpful in building up such a relation than the recollection of a pleasing and agreeable interior. Customers entering a well-lighted shop are at once favourably influenced. The cheerful illumination promotes a state of mind conducive to purchases, and in the future they will be involuntarily swayed by the impression of brightness and comfort. On the other hand, a dim and sombre shop fails to attract, and may leave behind a vague impression of dissatisfaction, even when the consumer has been well served and obtained what he wanted.

From the practical standpoint, inadequate lighting has many disadvantages. If goods cannot be clearly seen they are not likely to be kept clean and tidy. Stains will escape notice and goods deteriorate. Attendants are also hampered in serving customers if the latter cannot see clearly what they are buying, and if the former have a difficulty in distinguishing the particular variety of goods required. Hence, bad lighting means delay in service and mutual dissatisfaction. Want of cleanliness, an inevitable result of bad lighting, is particularly objectionable in shops dealing with food. If the lighting is faulty, a shopkeeper, even with the best intentions, may fail to perceive when things have become soiled or stale, with fatal results to trade.

## General Considerations.

While each form of shop presents its own lighting problems, there are several general considerations that should be borne in mind. Most interiors require general illumination from sources of light situated well above the line of vision. The aim should be to flood the interior with light but to leave a clear space so that one can see the entire length of the interior without one's vision being blocked by low-hanging pendants and chandeliers. If lights are mounted near the ceiling in this manner, the liability to cause objectionable "glare" is much diminished. But, nevertheless, care should be given to the choice of reflectors and globes to diffuse and distribute the light. The high power gas-filled electric lamps and modern superheated inverted gas burners now available make it quite feasible to put the sources at a considerable height above the ground, especially if suitable reflectors, screening the filament or mantle and directing most of the light downwards, are used.

In fairly lofty rooms, semi-indirect lighting, i.e. lamps concealed in bowls of prismatic glass or alabaster so as to direct most of the light on to a white ceiling, may be used. This form of lighting gives charming effects and has the notable advantage of concealing the lamp from view and eliminating glare. But there are two points to be remembered; firstly, that the method will probably require about 50 per cent more consumption of gas or electricity, as compared with direct lighting, to give a certain illumination; secondly, that units of this kind must be cleaned at regular intervals, as deposits of dust within the bowls give rise to a rapid diminution in illumination.

In most shop interiors it is now wise to aim at an illumination of 3–5 foot-candles. This will probably involve a consumption of about 0·5–0·75 watts per square foot of floor area with direct lighting by means of electric gas-filled lamps; or 0·03–0·05 cubic feet of gas per square foot, if modern gas burners are used. With semi-indirect

lighting, this consumption would probably have to be increased by about 50 per cent.

It has been assumed that the light is equally needed at all parts of the shop, which is very frequently the case. But in some shops, especially those of the smaller type, it would hardly be necessary to aim at this illumination everywhere. About 1–2 foot-candles is all that is needed for unoccupied floor, but 3–5 foot-candles should be used on the counters, and it is also desirable to see that racks and shelves receive ample illumination. General lighting of approximately even value is very commonly aimed at in large stores. One incidental advantage of such lighting is that, once installed, it should answer irrespective of the arrangement of the contents of the shop. It may even be possible to modify the arrangement of partitions if the lamps are high up, without making changes in the system of lighting.

## Colour of Walls and Ceiling.

One element of importance is the colour of walls and ceiling. Generally speaking, it is a great advantage to have walls and ceilings that are light in tint, as this diffused reflection of light gives soft shadows, and this is a great convenience in inspecting the contents of drawers, cupboards, etc. This question of shadows needs attention in arranging special counter lighting. Lamps should be so placed that a customer does not throw a marked shadow of his head on the counter when examining goods. Similarly, care is needed to avoid troublesome head shadows when an attendant turns his back to the lights in order to examine the contents of racks and shelves.

## Avoiding Shadows.

Certain cases may be mentioned where avoidance of troublesome shadows needs special care. In a show-room for motor cars, where the engines and mechanism are carefully scrutinized, good diffusion of light is important, and for this reason semi-indirect lighting, which gives soft shadows, is often preferred. In the trying-on room at the tailor's, light should be directed on to the figure of the customer from several different angles, so that he can judge the effect well in looking into the mirrors. The lights should be so placed as to avoid, as far as possible, troublesome images in the glass. On looking into the mirror, the customer should see his illuminated figure, not the sources of light that produce this illumination.

Opportunities for pleasing concealed lighting often occur. For instance, in a jeweller's, the contents of glass cases may be displayed by means of concealed tubular lamps, and the same applies to cabinets of china and similar articles. In a departmental store effective use may be made of small illuminated signs, indicating the way to various sections, and preferably using a distinctive coloured light so as to "stand out" and attract notice. Shadows cast by overhead lights also need to be guarded against in the boot shop. When a customer is trying on a boot and bends over to inspect it closely, troublesome shadows are apt to be cast if the light is behind him, and the system is not well diffused. Facilities for local lighting should be provided by the cashier's desk. As bills are often scribbled hastily in pencil on flimsy paper, a good illumination is needed to decipher them, and this should be provided by a local well-screened lamp on the left hand, sufficiently near the front of the desk to give a good illumination on the spot where bills are placed by customers when paying.

## "Artificial Daylight."

A special case is presented in shops dealing with coloured articles, where correct appearance of delicate tints is often of consequence. Amongst the trades concerned may be mentioned drapery and coloured fancy goods, picture shops, florists, etc. It is common knowledge that many colours are altered materially under artificial light, which contains more red and less green and blue than average daylight. Mixed colours, such as lilacs and purples, are particularly apt to be distorted. In such cases the use of the recently developed "artificial daylight" may be considered. Various lighting units have been introduced which are claimed to yield "artificial daylight," i.e. a light that is substantially the same as normal daylight in regard to effect on the appearance of colours. The conversion of light from an incandescent light is effected, either by reflection of light off a special coloured surface (as in the Sheringham Daylight) or by transmission through special tinted glass. In any case a considerable amount of light is inevitably lost by absorption and the efficiency is relatively low. But this would not be of moment in comparison with the advantage of getting correct appearance of colours.

Generally speaking, it would not be worth while to attempt to flood an entire room with artificial daylight, though this has been done occasionally in picture galleries. But in a draper's it would be useful to set aside a booth which could be illuminated in this way. Customers would thus have an opportunity of judging the appearance of a dress by artificial light and by daylight, and much subsequent misunderstanding might be avoided. "Artificial daylight" would be particularly helpful when questions of colour-matching arise. For it is a well-known fact that some colours which appear to match by artificial light do not do so in the daytime, and *vice versa*.

In many other shops a section devoted to artificial daylight would be useful; for instance, in a florist's, seeing that many flowers (those of blue, mauve, or lilac tint, for instance) do not appear to advantage by artificial light. Even in cases where correct appearance of colours is not

FIG. 4

THE SHOWROOMS OF MESSRS. MARSHALL ROBERTS, LTD., CAMDEN TOWN, ARE LIGHTED BY HIGH-PRESSURE GAS.
This photograph of part of the linoleum and carpet department gives an idea of the effectiveness of a well arranged installation.

vital, it is desirable to avoid illuminants that give particularly bizarre effects. It has been stated, for example, that some forms of electric arc lamps gave light of such a colour as to cause meat to look as though it were not fresh; whereas other special carbons have been recommended as giving it a particularly vivid and attractive appearance!

## Warehouses and Stores.

Apart from the sections of shops for the reception of the public, the sections devoted to storing goods, and warehouses, need careful lighting, though it is generally recognized that the amount of illumination required is considerably less. There is no need to aim at a spectacular degree of lighting, such as may judiciously be used to impress customers. All that is required is sufficient illumination to see one's way about in perfect comfort, and to ascertain quickly where goods are kept and select the variety desired. Hence, in store-rooms and warehouses an illumination of the order of 1–1½ foot-candles (average) is usually ample. Here again the position of lights and selection of fittings need care. While ornamental devices are unnecessary, the ordinary shallow opal shades so commonly used with lamps in warehouses do not serve their purpose well, as metal filament lamps project from them, giving rise to glare, and the distribution of light is faulty.

Warehouses commonly contain series of shelves separated by narrow gangways. The accompanying sketch gives an idea of the best positions for lights, the filament being screened from view and the height adjusted so as to obtain as even an illumination as possible from top to bottom. In these circumstances it is always difficult to get sufficient direct light into the recesses, and it is advantageous for all materials and surroundings to be as light as possible. For instance, if there is a white ceiling and a certain amount of light is directed thereon, this diffused light is very useful in penetrating into the gangways.

Fig. 5

Typical Lighting of the Interior of a Store, giving well diffused General Illumination

Comparatively small lamps may be used in the gangways—40 or even 20 watt electric lamps may be used; medium or even bijou inverted gas burners. It is desirable that all such lights should be under separate control, as it is only rarely that all the lights are required simultaneously. There should be first sufficient general illumination to find one's way to any spot, then, second, means for turning on or off only those lights that are needed in particular gangways. Although this complete control of light may involve some

additional initial expense, it usually pays in the long run on account of the saving in current effected.

Other forms of stock rooms are not devoted mainly to shelves but have a clear open space. This should receive moderate illumination from overhead units of a simple character. In some cases a part of the room is devoted to shelves behind a long counter. Lights placed high up above the counter may then be so adjusted as to illuminate both the counter and the shelves behind. Special local lighting, however, is needed at the desks where orders for goods, delivery notes, receipts, etc., are examined. A local well-shaded lamp is useful so that the writing can be more clearly deciphered by tilting the paper with reference to the lamp so that the light falls upon it at the most favourable angle.

## Packing Rooms.

In rooms used for packing and transport of goods, and in yards for their receipt and despatch, large packages are frequently handled, and it is particularly important that the lamps should be mounted high up, so as to leave a clear space for operations. Light should come from many different angles so that the vertical faces of such cases may receive sufficient illumination; hence, here again, white walls which reflect and diffuse the light are helpful.

As in warehouses and rooms used for packing there is inevitably a good deal of dust, it is usually best not to use semi-indirect lighting, even though this form has certain advantages as regards diffusion of light. Porcelain enamelled iron reflectors of good design, giving direct lighting, are easily cleaned and usually answer the purpose well.

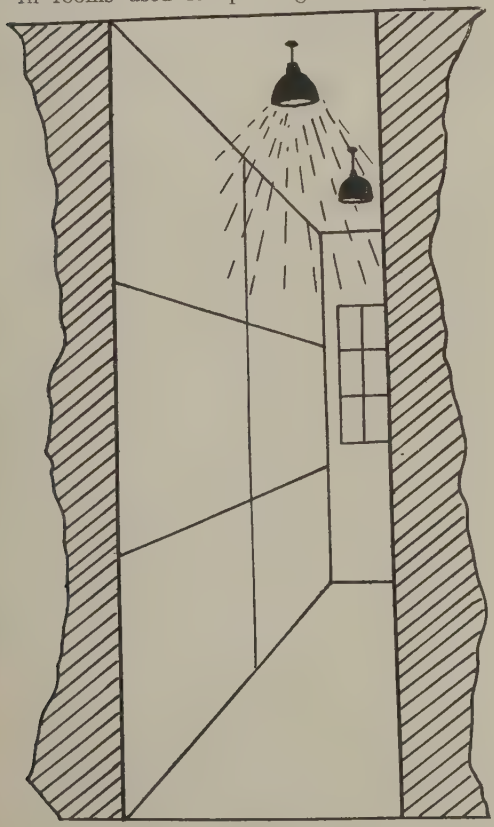

FIG. 6

TYPICAL LIGHTING FOR RACKS IN WAREHOUSE

Light should be distributed on either side of the gangway and all mantles or filaments properly shaded.

CHAPTER III

# THE LIGHTING OF OFFICES AND LIBRARIES

OFFICES and libraries may conveniently be considered together, as in both cases we are concerned mainly with the provision of sufficient light to read in comfort. In all such cases one is at once confronted by the question whether one should use general lighting, i.e. illuminate each part of the room equally well, on a symmetrical plan, or local lighting, in which cases specific lighting units are allotted to various workers. The question has been much affected by progress in lamps and lighting appliances during recent years. Formerly, local lights for each worker were considered essential in rooms where work involving any degree of effort takes place. But this was partly due to the fact that, with the lamps then available, it was difficult to secure sufficient illumination on the desk or table unless the lights were brought quite near. But the high candle-power efficient lamps now furnished, and the useful reflectors that can be applied to distribute their light, make it possible nowadays to put the sources at a fair height near the ceiling, and yet secure good illumination at the working level. Hence, general lighting is now used to a much greater extent than in the past.

## General Lighting.

One great advantage of general lighting is that, if efficiently installed, it answers its purpose irrespective of the positions of workers and furniture, so that modifications in this respect may be made without having to arrange the lights anew. Hence we find that general lighting by overhead units, leaving a clear view of the room, is very generally employed in cases where a number of workers are seated side by side and engaged on much the same class of work. Light tints for

walls and ceiling are very desirable in such cases, as the reflected light obviates inconvenient head-shadows. Semi-indirect lighting is considered particularly suitable when clean white ceilings are available, though, as indicated in previous chapters, it is very important that such fittings should be cleaned at frequent intervals. In a discussion on the Lighting of Public Buildings before the Illuminating Engineering Society,[1] Messrs. Rayner Walsh and Buckley gave a useful summary of experiments conducted at the National Physical Laboratory, in conjunction with H.M. Office of Works. These experiments dealt mainly with semi-indirect lighting, which was considered preferable for the class of rooms under consideration. A sketch illustrating the types of fitting employed, which resemble those commonly used for office lighting, is reproduced in Fig. 7. Fig. 8 shows the installation of semi-indirect lighting in the new Ministry of Pensions building at Acton. It was considered that the working illumination should not be less than 3 foot-candles, and experiments showed that the corresponding consumption of electricity varied from about 0·4 to 0·6 watts per square foot of surface illuminated. Suitably spaced semi-indirect units give an even illumination on desks and tables, and are particularly useful in avoiding troublesome shadows. This is an important consideration when offices contain many drawers and pigeon holes, into which direct light does not readily penetrate. Indirect light, received from an illuminated ceiling and casting very soft shadows, has excellent "penetrating power."

## Local Lights.

When, however, we are dealing with rooms in which workers are not evenly distributed, and are engaged on somewhat different operations, local lights may often be used with advantage, though the writer considers that even in these cases general lighting of moderate intensity should be used as a basis, and special lights added thereto. Rooms which are used merely for storing papers, and in which no difficult clerical work is done (such as occur in public libraries) do not require high illumination; 1–1·5 foot-candles would suffice. If only the walls are lined with shelves, central semi-indirect lighting will often answer. But if there are series of shelves with narrow gangways between, it becomes necessary to install local lights, in the manner discussed in the previous chapter on warehouse lighting.

A type of room sometimes met with is that in which the walls are occupied by shelves, and papers are brought to a central table for examination. In this case, requirements would usually be met by a good semi-indirect central unit. If the room exceeds about 20 ft. square, distributed units, supplemented by a special light over the central table, become necessary.

In the average small office, where only a few lights are used, it is common to provide lights for each worker. In banks, workers often prefer local lights, and, generally speaking, a good case may be made out for this form of lighting if the work imposes an exceptional strain on the eyes. When local lights are used, there are several points to be noted. The local lamp must naturally be well shaded; it is essential that no part of the filament or mantle should be visible to the worker seated at his desk. When standard lamps are used, these should be mounted in front of the worker, the shade being so designed as to light the desk evenly. Ordinary conical shades are apt to prove somewhat unsatisfactory in this respect, and more even illumination is often obtained from the forms of desk-units with reflectors of special contour. In any case, the unit should be so arranged that there is no risk of its being struck by the handling of large ledgers, etc. The angle at which light strikes the surface of a desk is of importance. In writing on more or less shiny paper, one should ensure that the slope of the desk is such that light is not directly reflected into the worker's eye—a form of glare that is particularly irritating if suffered continuously. For work that is somewhat trying to the eyes, a local illumination of 5 foot-candles, which can readily be obtained from portable lamps, should be provided. When shaded standard lamps are used, some supplementary general lighting, giving an average of about 1 foot-candle, is desirable to relieve the surrounding obscurity and prevent excessive contrast.

## Avoiding Shadows.

Two faults to be avoided in arranging local lights are head-shadows and troublesome hand-shadows. Head-shadows are not likely to arise when stand lamps are used. Hand-shadows (for an ordinary right-handed person) may be guarded against by so arranging the seats with respect to a row of lamps that for each writer the light comes somewhat from the left. In no circumstances should the light come from the right, as in this case an inconvenient shadow from the hand is cast over the writing.

## Drop-lights.

In a small office, desks and typewriters situated at different points in the room may be illuminated by overhead drop-lights. Such lights obviously should not be immediately overhead, as in this case troublesome shadows are at once cast when the worker bends forward. Although the old rule that "light should come over the left-hand shoulder" is a sound one to apply to persons reading in a drawing room, it does not work so well in the case of a person writing. It is better

[1] *Illum. Engineer*, April, 1922.

for a drop-light to be somewhat in front and to the left of a person at a desk, and the author prefers a similar position for use with a typewriter. The light should, of course, be well shaded so that the worker is not likely to catch irritating glimpses of mantles or filaments. While in small offices drop-lights may conveniently be used, this method is best discarded as soon as one has to deal with rooms of fair size containing a considerable number of workers. A series of drop-lights is then unsightly, and probably little more economical than general lighting. One other case in which local lights are often needed to supplement general lighting may, however, be mentioned, namely, when there is a row of desks facing a window. Such desks are apt to receive insufficient light, owing to the obstruction of the worker's body to the light behind him, even if semi-indirect lighting

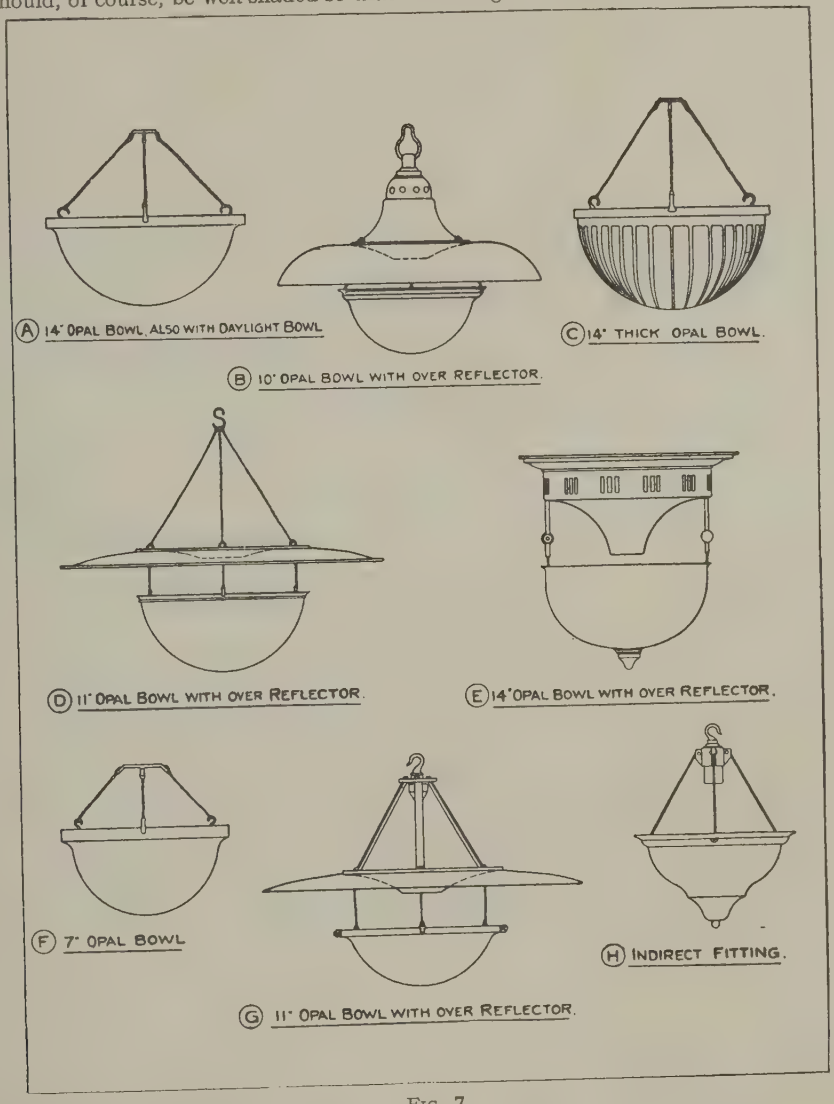
A 14" OPAL BOWL, ALSO WITH DAYLIGHT BOWL
B 10" OPAL BOWL WITH OVER REFLECTOR.
C 14" THICK OPAL BOWL.
D 11" OPAL BOWL WITH OVER REFLECTOR.
E 14" OPAL BOWL WITH OVER REFLECTOR.
F 7" OPAL BOWL
G 11" OPAL BOWL WITH OVER REFLECTOR.
H INDIRECT FITTING.

FIG. 7

SHOWING TYPICAL FITTINGS TO PROVIDE GENERAL LIGHTING IN OFFICES

As used in experiments in the new Ministry of Pensions Building at Acton.

is used. A few local lights somewhat in front of them, therefore, furnish a useful supplement to the general illumination.

## Daylight Incandescent Lamps.

One problem that deserves consideration when the short days of winter arrive, is the treatment of the "transition period," when daylight has not yet completely failed and yet it is hardly time as yet to resort to full artificial lighting. When a room is lighted by a window on one side it will often happen that the light on the desks most remote from the window becomes insufficient when the illumination near the window is still ample. Hence it is desirable that lights furthest from the window should be under separate control, so that they can be turned on in advance of the others. The trouble is, however, that the daylight and artificial light do not mingle satisfactorily. Hence it has been suggested that the new "daylight" incandescent electric lamps, equipped with special blue glass bulbs, and giving a light which closely resembles daylight in colour, might be used. The writer has used such a lamp over his desk and found that the artificial light mingles well with daylight, so that the awkwardness of the transition period is avoided.

## Drawing Offices.

Drawing offices present special problems, and many engineering offices, where tracing and drawing is habitually done, fall into this class. It seems to be generally agreed that, in view of the importance of avoiding troublesome shadows from the edges of drawing implements, indirect lighting is best. The illumination on the drawing-board should be at least 5 foot-candles. In some forms of work, especially fine tracing, a supplementary local light is really necessary. Such lights should be completely shaded from the eyes of the worker, and should preferably be mounted on some adjustable support so that they can be moved across the board to any desired position.

FIG. 8

SHOWING SEMI-INDIRECT LIGHTING OF A ROOM IN THE MINISTRY OF PENSIONS BUILDING AT ACTON

### Libraries.

In libraries one meets problems generally similar to those in offices, and there is the same discussion as to the relative merits of general and local lighting. The problem is partly psychological. One finds that in the reading room, where light literature is read, bright and cheerful general lighting is commonly provided. In the "reference room" for the use of students, however, the librarian seeks to provide a different atmosphere by installing local reading lamps and leaving the rest of the room in comparative darkness. This principle should not be carried too far, however, as excessive contrast between the brightly lighted page of a book and the surroundings is the reverse of restful. The general illumination in such cases should be at least of the order of 0·3 foot-candle, while 3–4 foot-candles should be available on the reading desk. A combination of local shaded lamps with subdued indirect lighting would give good results in such cases, especially as the indirect lighting is particularly useful in enabling the titles of books on shelves to be read, sharp shadows cast by the body on the shelves being eliminated.

In libraries one meets in an acute form the problem of lighting racks and shelves. Local units at the top of shelves are often provided, but it is doubtful if this form of local lighting effects good results. Unless the lamps are situated a fair distance from the shelf, even illumination from top to bottom is difficult, and the oblique direction from which rays strike the lower books renders the light of little value. In most cases it seems best to rely on good, well-diffused, general illumination for the lighting of bookshelves.

The store-rooms in some libraries reach such large dimensions that artificial lighting is not attempted. The positions of books are well known to attendants, who select what they require by the aid of an electric torch.

## CHAPTER IV

## THE LIGHTING OF FACTORIES

The lighting of factories has received special attention during recent years, on account of its obvious relation to production. Authorities agree that good illumination is essential in the interests of safety, health, and efficiency of work, and the matter has been the subject of prolonged study by a special Home Office Committee, which has issued three reports (in 1915, 1921, and 1922). An important feature of this work has been the evidence adduced that many accidents are due to inadequate illumination. Thus, it has been shown that in many industries the accident rate is higher by artificial light than by daylight (in some industries, such as docks, shipbuilding yards, and engineering works, as much as 90–100 per cent higher). It has also been found that accidents are more prevalent in the winter months when artificial light is mainly used. The inference is that a proportion of accidents must be due to more or less inadequate artificial lighting, and though conditions have improved greatly during recent years, it is probable that only in few factories can the artificial lighting be considered as good as that met with under average daylight conditions. The evidence in regard to persons falling, a form of accident particularly likely to be caused by inadequate lighting, is especially clear. In 1920 there were 138,702 reported accidents in factories, of which 17,393, or about 12 per cent, were due to "persons falling." This form of accident is thus an important item, the more so because it is likely to be of a serious nature.

### Efficient Production.

Attention has also been directed to the relation between lighting and efficient production. Experiments have shown that improvements in illumination have led to increases in production of 25 per cent or more. Apart from the obvious necessity that workmen should be able to see clearly the work on which they are engaged, there is reason to believe that bright and cheerful lighting has a distinct psychological effect, leading people to put forth their best efforts, whereas dull and depressing illumination inclines them to relaxation. An important series of experiments recently conducted for the Industrial Fatigue Research Board showed that output in the silk weaving industry is, in general, 10 per cent greater by daylight than by artificial light, even when the latter was considered comparatively good. There is little doubt, therefore, that quality of lighting has a direct influence on production.

### Cost.

Another point that is now becoming better appreciated by manufacturers is that the actual cost of good lighting is a small item in comparison with the benefits derived. It is probable that in many cases, where skilled workers are employed, the cost of lighting forms less than 1 per cent of the total cost of production. If, therefore, by increasing expenditure on lighting by even 50 per cent, one were to increase production by only 5 per cent, the change would still be well worth while. Good lighting is equally valuable in diminishing spoiled work and checking mistakes, many of which are believed to be due to faulty lighting conditions.

It is natural, therefore, that the lighting of factories should have been the subject of special study. The field is a very wide one. Each

industrial process presents its own special problems, and though one can lay down some general principles applicable to all forms of industrial work, the best results are only attained by an expert who is not only familiar with illuminating engineering, but understands the process that is carried on.

## Fundamental Requirements.

The fundamental requirements, as specified in the reports of the Home Office Departmental Committee on Lighting in Factories and Workshops, may be broadly stated as follows—

1. Sufficiency of illumination.
2. Reasonably uniform illumination over the area of work.
3. The placing and shading of lamps so that light does not fall directly in the operator's eyes when at work, or when looking horizontally across the room.
4. The placing and shading of lamps so as to avoid inconvenient shadows on the work.
5. A steady light, without appreciable flicker.

Flickering sources of light should not exist in any good modern installation. Flicker may be caused by a partial stoppage in a gas-pipe, or by irregularity in the voltage of an electrical supply (such as may be met with in a badly adjusted private plant running from a gas engine). Arc lamps, if out of adjustment or of obsolete pattern, are also liable to flicker. But such defects are usually eliminated in modern installations and ought not to exist. It is therefore chiefly the other four requirements that require study.

The Home Office Committee has not yet proposed any legal minima in regard to *working illumination*. The only values it has put forward on this basis are merely for the general illumination necessary in the interests of safety and convenience. Thus, a minimum of 0·25 foot-candles is required in the working areas of factories and 0·4 foot-candles in foundries. These values can naturally be easily provided by modern methods, and in cases where this is not so, the defect is presumably merely an oversight. The above values are proposed irrespective of the illumination necessary for work. The question of legal minima for working illumination cannot be settled until further data has been collected for the great variety of industrial processes involved. It is suggested that the matter might be dealt with in co-operation with the various industries, who would thus help in deciding their own particular needs. But meantime the Committee, in their third report, have presented a schedule, covering a great variety of industrial operations, divided into "fine" operations (requiring 3 foot-candles) and "very fine" operations (requiring 5 foot-candles). These values are presented as an indication of good modern practice. But in many cases it will be found that enterprising employers prefer to exceed 5 foot-candles. Large workrooms receiving as much as 8–10 foot-candles are now not uncommon, though this order of illumination would never have been met with a few years ago.

## Proper Distribution of Light.

The question of providing sufficient illumination, however, is only a small part of the whole problem. The next point is the proper distribution of the light, and this is bound up with the use of scientifically designed reflectors. Nowadays the manner in which light is distributed from a specified lighting unit is thoroughly studied by leading manufacturers, and spacing rules are provided enabling them to be so arranged as to obtain reasonably uniform illumination over the working area. Alternately, in cases where it is only necessary to produce a certain illumination at a particular spot, this can be calculated from the "polar curve" furnished by the makers showing the resultant candle-power in various directions. In passing, it may be mentioned that one of the chief elements in advancing methods of lighting has been the introduction of simple forms of illumination photometers, by the aid of which the illumination at any point can readily be measured in foot-candles, by comparison with a calibrated small lamp (fed from a portable battery) within the instrument. Thousands of measurements of this description were made by the Home Office Departmental Committee, and the knowledge thus gained enabled them to feel confident that such recommendations as they made could easily be fulfilled in practice. Nowadays a leading company concerned with illumination is prepared to state the actual illumination which they will furnish, and to show by measurements that this is actually provided in the completed installation.

## Avoidance of Glare.

A question that is certainly quite as important as the provision of sufficient illumination is the avoidance of "glare"—the dazzling effect of bright, exposed sources of light falling directly within the field of view. The recommendation made by the Home Office Committee on this subject may be quoted—

> Every light source (except one of low brightness) within a distance of 100 ft. from any person employed, shall be so shaded from such person that no part of the filament, mantle, or flame is distinguishable through the shade, unless it be so placed that the angle between the line from the eye to an unshaded part of a source and a horizontal plane is not less than 20 degrees, or in the case of any person employed at a distance of 6 feet or less from the source, not less than 30 degrees.

The best means of complying with this recommendation have been recently discussed by Mr. L. Gaster in a paper before the Illuminating Engineering Society.[1] Clearly the best course is to shade

[1] *Illum. Engineer*, March, 1922.

the mantle or filament, with diffusing glass vitreosil cups, etc., so that it is completely screened from the eye of the worker. The same condition is secured by using suitably deep opaque reflectors, such that the line joining the filament to the rim of the reflector makes an angle of at least 30 degrees with the horizontal. If lighting units of this description are used they can be placed in any convenient position in the room, without its being necessary to trouble about the angle as specified above. It should, however, be borne in mind that when a very brilliant source is covered by a small shade (such as a silica cup covering a high pressure gas mantle, or a small opal globe surrounding a high power electric source), the brightness may exceed 15–20 candles per square inch, and may cause considerable glare, in which case the lighting unit should be treated as a source of light, and due regard paid to the conditions specified above as regards angle.

## Size of Lamp.

Those in charge of lighting installations in factories should be particularly careful to ensure that, when a lamp is replaced, the new lamp is of the same shape and dimensions as the reflector. Unfortunately, electric lamps of a given consumption differ considerably in shape and dimensions. Hence it may happen that the new lamp, if carelessly selected, may project right outside the reflector, the exposed filament causing considerable glare, while the intended distribution of light is radically altered.

## Shadows.

Troublesome shadows are eliminated mainly by careful study of the position of the light source in regard to the machine. In factories devoted to very simple work with relatively large objects, a well-diffused system of general lighting should give little trouble, especially if the walls and ceilings are light in colour. In these circumstances the reflection of light off surrounding surfaces should give rise to soft effects, so that abrupt and dense shadows cast by the person of the worker should not occur. So great is the importance attached to light surroundings that some firms have made a practice of painting the framework of machinery, adjacent to the actual point where work is done, a white colour. It has also been

FIG. 9

Illustrating Types of Reflectors so designed as to reduce glare to a minimum and comply with Home Office Departmental Committee's requirements.

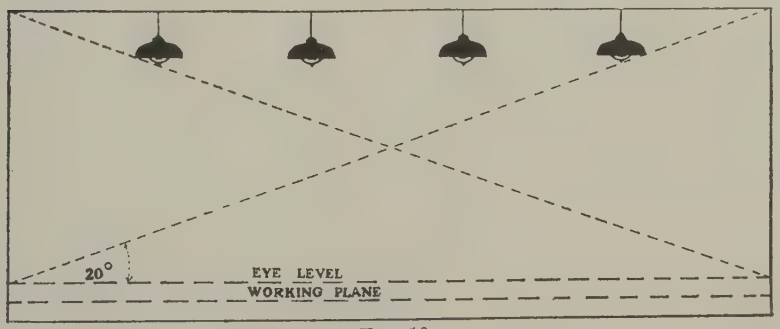


FIG. 10

Showing height at which lighting units having exposed filaments must be placed so as to fall outside the 20° angle, specified in the section of the Second Interim Report of the Home Office Departmental Committee dealing with glare. Lighting units equipped with suitable diffusing glassware to screen the filament, or with reflectors the edge of which falls *below* the filament could be hung at a lower level.

pointed out that in cases where a light concrete floor can be used this aids materially in the diffusion of light.

## Textile Operations.

The cases in which the greatest care has to be exercised to avoid inconvenient shadows are those where the worker is engaged on somewhat minute and fine work, and where obstruction to light is liable to be caused by bulky machinery. Textile operations fall into the latter class, and some of this intricate machinery cannot be really adequately lighted from overhead, owing to the narrow gangway between rows of machines. It has been proposed to incorporate in the design of such machines special local lamps, shedding light on the actual point of work, where threads need constant surveillance. Sewing machines, again, are usually considered to need special local illumination at the point of the needle when very fine work has to be done, and in the case of drills and machines with cutting edges, local illumination is again necessary to prevent inconvenient and deceptive shadows arising. In some operations, where the worker has to guide the knife carefully along a pattern on the material, the source of light has to be very carefully placed to avoid a shadow being cast over the work by the cutting edge—a condition that might occasion spoiled work or lead to serious accidents.

FIG. 11

VIEW OF A CLOTHING FACTORY LIGHTED BY GAS-FILLED ELECTRIC LAMPS IN BENJAMIN REFLECTORS mounted high up near the girders and allowing a free view of the room. No filaments are visible to observers looking across the room.

## Local Lighting.

Many special processes might be mentioned that present special problems of this kind. Hence one finds that there is, in general, greater scope for local lighting in factories than in shops or offices, discussed in the previous chapters. Factories may be divided into several distinct classes. Firstly, there are those occupied by workers placed near together, and all engaged on the same simple process. As a rule, rooms of this kind are best lighted by overhead direct units, each equipped with a suitable reflector. Indirect and semi-indirect lighting are not usually employed for

industrial work, because of the difficulty of keeping such units clean, and also because clean white ceilings for the reflection of light are not, as a rule, available. Nevertheless, some types of semi-indirect units, shielded by glass so as to be substantially dust-proof, and using an over-reflector of enamelled iron in place of the ceiling for the downward diffuse reflection of light, are now available. One great advantage of overhead lighting from units mounted near the ceiling is that it leaves a clear view of the entire work-room, so that the manager can see what each operator is doing. Secondly, one meets factories containing some rooms of the above class, but other sections devoted to fine work, where local lighting, adapted to the particular process, is needed. Thus, in an engineering workshop one meets several varieties of lighting. There may be a central space devoted to work with large objects, such as the erection of machinery. Here the main requirements are usually met by aid of powerful overhead units, flooding the area with an illumination up to, say, 3 foot-candles. Even here it is desirable to install plug-sockets or local gas connections, where portable lights for local inspection may be used. Special portable lights, for instance, may be needed for the inspection of cavities or recesses in machinery, to which the general lighting cannot penetrate. Adjacent to this main central area there may be bays where lathes, drills, planers, etc., are mounted. Such machinery often requires local lighting, with a minimum of 5 foot-candles, where fine work is done. Recently a convenient form of travelling light, mounted direct on the carriage of a lathe so that strong illumination is afforded at the point of work in such operations as screw-cutting, has been introduced. It need scarcely be said that all such local lamps should be carefully shaded so that the filament or mantle is screened from the eyes of the worker and the light directed where it is mainly required. Finally, there are factories where the severe requirements of the work are such that individual lights for workers are necessary throughout. Some boot-making factories, and works devoted to the making of garments from dark cloth are treated in this way. It should, however, be noted that even in these cases one must not rely exclusively on the local lights. There should be moderate general illumination from overhead lights so that the contrast between the brightness of surroundings and the illuminated material is not too severe.

## Colour Considerations.

A very important circumstance is the colour of the material worked with. Some forms of dark cloth, for example, reflect only 5 per cent, or even less, of the light falling on the material, and require correspondingly high illumination, the essential consideration being that the actual *brightness* of the material, as seen by the eye, should be sufficient. It has been shown that the product of the illumination and the percentage of light reflected by material should be constant; in other words, that the illumination should be increased in proportion to the coefficient of absorption. The high illumination needed for work on very dark material can, in general, only be obtained by local shaded lamps, placed within a few feet of the work. Another reason for preferring local illumination in such cases is that it is desirable for the brightness of the material to be greater (though, as stated above, not giving too severe a contrast) than that of surroundings. In these circumstances the eye is naturally directed on the work. But suppose that the high illumination were obtained by general lighting, flooding the entire room with bright light. Apart from its relatively high cost, this mode of lighting would mean that the walls and surroundings were probably much brighter than the working material. Hence the eye would be continually distracted, and the tendency would be for the material to appear, by contrast, unduly dark and difficult to distinguish.

Considerations in regard to shadows also favour local lighting, or at least direct lighting without too much diffusion, in certain cases, i.e. when the nature of the surface and its texture have to be carefully studied. If the light is completely diffused, so that it comes from all directions, it becomes difficult to distinguish the small pattern or the grain of some forms of cloth and knitted materials, whereas with local lights the small projections "stand out." Hence in certain cases one may get too little shadow, and completely "shadowless" conditions of illumination are not usually desired.

Finally, there are some classes of operations, particularly those occurring in dyeing and textile mills, where the *colour* of the material, as seen by artificial light, is of great consequence. As has been previously remarked, the colour of many surfaces is altered considerably when illuminated by artificial light, which in general contains more red and less blue and violet than normal daylight. The delicate colour-matching operations in the dyeing industry were formerly carried out exclusively by good daylight. This was in many respects inconvenient. Daylight in this country is extremely variable, both in intensity and in colour. The intensity of daylight is much affected by the season of the year, the time of the day, and by climatic conditions. Mist and fog also alter its colour appreciably, and may lead to distortion of colour values. Hence the periods during which such accurate colour-matching operations can be carried out are distinctly limited during the winter months, and not infrequently work has to be suspended until more favourable weather conditions occur.

## "Artificial Daylight."

This difficulty promises to be overcome by the introduction of "artificial daylight" appliances. The essential feature of such appliances is that the light from an incandescent lamp is modified in such a way as to be converted into a very close resemblance to normal daylight.

There are two chief methods of effecting the change. One may, firstly, equip the lamp with a reflector concentrating the light downwards and interpose a sheet of tinted glass, cutting out portions of the spectrum in such a way that the resultant light produces colour effects identical with daylight. The special "daylight glass" manufactured by Chance Bros. & Co. is stated to be very accurate in this respect. More recently, electric lamps with bulbs of tinted glass have been introduced.

The second method, adopted in the "Sheringham Daylight," is to bring about the desired change by means of reflection. In this form of unit a metal bowl, with polished interior, is placed under the lamp, so as to intercept all downward rays, and the light is directed upwards on to an extensive upper reflector, on which is painted a pattern in yellow, green, and blue in special proportions. The light directly reflected downwards is stated to resemble daylight almost exactly in colour-value, and the resemblance is accentuated by the diffused nature of the light. This is an indirect unit, producing a diffused light covering a relatively large area, whereas the units utilizing daylight glass lend themselves to a more concentrated form of light.

FIG. 12

PHOTOGRAPH OF A FACTORY AT CROYDON

Lighted by High Pressure Gas Lamps 25 ft. high

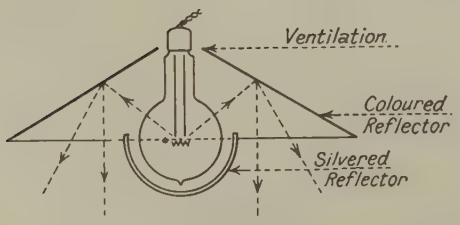


FIG. 13

Showing Section of the Sheringham Daylight.

SECTION 4

# Industrial Heating and Ventilation

By JOHN D. TROUP, M.I.MECH.E., *Editor of "Industrial Power"*

## CHAPTER I

## INTRODUCTION

THE heating of buildings is a science which conforms to certain established laws. It should, however, be understood that such laws cannot claim to be exact laws, and experience governing their use is still somewhat incomplete.

This state of affairs is, perhaps, easily understood when it is considered under what varying conditions the heating of different buildings has to be carried out. An extreme example will make this point clear. Take, say, a modern mill or factory, which is practically a steel frame-work filled in with glass, and assume that it has been built upon elevated ground, where it is exposed to the prevailing cold winds; in such a case as this the radiated heat losses from the building will be very great. In the case of an inner room of a well-built flat or mansion, where none of the four walls is exposed to the outside atmosphere, then the radiated heat losses will be very low.

With these two examples in mind, one can readily imagine the hundreds of intermediate cases, where conditions vary owing to building construction, position, and weather conditions; and understand that it would be almost impossible to formulate a law covering all of these conditions.

### Underlying Principles.

On the other hand, however, there are certain underlying principles which govern all heating problems, and before proceeding to consider each of the main systems in use for heating purposes, it will be necessary to understand these underlying principles. They will be presented in as simple a manner as possible, but it is well worth the effort to grasp thoroughly what such principles mean, because they make the relative values of each heating system much more understandable, and enable the reader to obtain more than an elementary knowledge of the principles of heating.

We must say at once that the day of the old-fashioned fire grate is fast departing. It is doubtful if the next generation will see an open fire grate for the direct heating of a building, unless it be in a museum. Our old friend King Coal will remain, although even coal will probably take a new form. The open fire grate is condemned on two principal points; firstly, because it is uneconomical, and, secondly, because of the vast amount of smoke which it emits into the atmosphere. This latter point has been very fully dealt with in the press during recent years, and the enormous monetary loss which occurs annually, due to emission of smoke, has been given worthy publicity, but it is doubtful even now if the general public realize the great benefits which would result from the total abolition of smoke.

The value of the first point, namely, the uneconomical conditions of an open fire grate, are well illustrated by stating that if the same amount of coal which is used in one fire grate for heating a single room was used under a suitable water boiler, then four or five rooms could be heated with the same amount of coal by means of circulating hot water, and, in addition, the heating would be more efficient.

It will be found, therefore, in the following chapters that the various methods described are really different methods of conveying the converted heat of the original fuel to the point where it is to be used. In other words, fuel as such can only be converted into heat at one particular place, but the heat generated by such fuel is required for the heating of buildings at a large number of places, or over a considerable area; therefore, some system of conveying heat to the required places must be adopted in order to obtain the most highly efficient results. This explanation is really the sum and substance of heating systems, but before any particular system is adopted it is necessary to consider all the local conditions, as there is no universal system which may be adopted in all cases.

The systems to be described, therefore, are the different methods of conveying heat throughout a building, and these may conveniently be divided into the following sections, each of which will be dealt with presently in their turn, namely, hot water, steam, hot air, gas, and electricity.

### Measurement of Heat.

The first matter of importance is the measurement of heat itself. Here we have a law which is exact, and one which is in universal use for making all heat calculations. Heat is a form of energy, and as such can be measured. It is also convertible into other forms of energy, such as into

mechanical motion, and the two forms of energy bear a fixed and definite relationship to one another, which can readily be calculated. For example, it has been demonstrated by careful experiments that 1 heat unit is equivalent to 777·64 ft.-lb. of work. This latter figure means the work done by raising 777·64 lb. a distance of 1 ft. The heat unit, called in this country the British Thermal Unit (B.T.U.), is the amount of heat required to raise 1 lb. of water by 1° F. In France the heat unit is the Calorie, and is the amount of heat required to raise 1 kg. of water from 15° to 16° C.

The heat unit is one which is always with us. It starts at the coal or other fuel. Coal may

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ELECTRIC LOG FIRE

contain 8,000 to 16,000 B.T.U.'s per lb. For a given heat output, therefore, it would be necessary to consume 2 lb. of the former to 1 lb. of the latter; so the first thing to know about a heating system is how many heat units are available at the boiler furnace, as this factor determines how many heat units are available for heating the building. All the furnace heat units are not, of course, available, as some are lost in their change over from the coal to the water, or other heating medium.

The importance of the heat unit will thus be clear, and it is the aim of any heating system to carry the maximum number of heat units from the furnace to the place where they are required for use.

There is only one other point we need deal with in this chapter, namely, the sensible and latent heat of steam. What is called the latent heat of steam is the very essence of steam heating.

## Sensible and Latent Heat of Steam.

When heat is applied to water the temperature of the water rises, and such increase in temperature may be indicated on a thermometer. This increase goes on as long as external heat is applied, with a corresponding rise in the thermometer, until a temperature of 212° F. is reached. At this temperature water boils (when at atmospheric pressure), and no further increase in temperature is recorded. The heat thus absorbed by the water is termed "sensible heat," because it is visible on a thermometer, but when heat is continued to be applied to boiling water such heat is still absorbed, even though it is not visible by any recording instrument. This additional heat is absorbed by the water until there is sufficient to change the liquid state of the water into the gaseous state—steam. Now an important event has happened; the temperature of the steam is still 212° F. (at atmospheric pressure), but 1 lb. of such steam holds vastly more heat units than 1 lb. of boiling water. This extra invisible heat is termed "latent," and is known as the latent heat of steam. The actual latent heat in 1 lb. of steam (at atmospheric pressure) is 971·7 B.T.U.'s, that is to say that 1 lb. of boiling water has absorbed 971·7 B.T.U.'s in becoming steam at the same temperature. When this steam is again condensed back to water, as happens in a steam heating system, the whole of the latent heat is given up, so that the great importance of latent heat is clear.

It should be noted that the above figures are given at atmospheric pressure. When water is heated in a closed boiler, the pressure is greater than atmosphere, and so is the temperature, but the temperature figures for a particular pressure may be obtained from any standard book of steam tables.

CHAPTER II

# HOT-WATER HEATING

THE first heating system to be considered will be the ordinary circulation of hot water. This is taken first because it is the simplest and has a wide application, and we will here enlarge on a number of points which are common to all heating systems.

## Heat Transmission.

When considering the heating of any building or group of buildings, there are certain main factors which must be taken into account at the beginning.

The first matter to decide is the temperature to be maintained within the building, or it may be that different temperatures will be required in different sections of a building. To arrive at such a decision it is necessary to consider the use to which the building is to be put. For example, a

foundry would not require the heat necessary to maintain a given temperature in, say, a city office, because a certain amount of heat is supplied in the foundry by the casting process, and the occupants of the building are able to take a certain amount of exercise.

Having decided upon the temperature to be maintained, the next point is to consider how much of the heat supplied to the building will be lost by radiation. This is a point upon which experts differ; that is to say, they differ on the actual heat lost from the different sections of a building under varying conditions, such as the heat loss from windows, walls, roofs, and floors. All buildings radiate and lose a certain amount of the heat supplied by the heating apparatus, and such loss is generally calculated as the number of heat units lost over a given period of time. It will readily be understood that thin exposed walls lose more heat to the outside atmosphere than thick walls, and if the latter are provided with an air space, such as in hollow walls, the heat loss is still less. It is for this reason that freezing chambers are constructed of hollow walls filled with special material which is a poor conductor of heat, only in this case the object to be attained is to prevent heat passing from the outside atmosphere to the freezing chamber within.

In order to bring these losses down to figures which can be used in practical work, different authorities have formulated certain co-efficients or constants, and these are used in relation to the exposed areas of the different portions of a building, and by means of which the heat losses of such portions of a building are arrived at.

As the principles in this problem involve all heating systems, we will quote from one of our leading authorities—Mr. Walter Jones, a Past President of the Institution of Heating and Ventilating Engineers. In a paper dealing with the low pressure hot-water system, which he read before the Institution in 1915, Mr. Jones stated—

> The first essential for designing a successful heating installation is to strike a balance between heat losses (transmission) through glass, walls, and other cooling surfaces, and the heat given off (emission) by the radiating surfaces. To arrive at the losses it will be necessary to ascertain—
>
> 1. The total cooling surface in square feet of glass, walls, ceilings, floors, etc., bearing in mind that losses occur through all substances in every direction, and that heat must be provided to cover all such losses.
> 2. The cubic contents of the room, and the number of times the air has to be changed per hour.
> 3. The temperature differences in degrees Fahrenheit between the room and the outer air.
> 4. The excess temperature of the radiator in degrees Fahrenheit above that of the air in the room.
> 5. The heat emitted in B.T.U. per foot super of radiator per degree difference per hour.
>
> After obtaining the foregoing particulars, we must ascertain what co-efficients will provide the necessary emission (Nos. 4 and 5) from the radiating surface to balance losses due to transmission (Nos. 1, 2, and 3).
>
> The heat loss co-efficients (K) given by different authorities vary somewhat, as shown in the following—

TABLE I.—TRANSMISSION

| | | It is proposed to adopt— K | | |
|---|---|---|---|---|
| Glass . . | from 1 | to 1·08 | 1 | per sq. ft. glass |
| Walls (outer) | ,, ·14 | ,, ·37 | ·25 | ,, ,, wall (outer) |
| Walls (inner) | ,, ·12 | ,, ·28 | ·17 | ,, ,, wall (inner) |
| Ceilings with room above | ,, ·17 | ,, ·35 | ·2 | ,, ,, ceilings with room above |
| With roof space above . | ,, | | ·3 | ,, ,, with roof space above |
| Floors . . | ,, ·07 | ,, ·17 | ·1 | ,, ,, floor |
| Air . . . | ,, ·018 | ,, ·019 | ·018 | ,, ,, per cubic foot of air |

*Note.*—1 B.T.U. will raise 55 cu. ft. of air 1° F., hence 1 B.T.U. ÷ 55° = ·018 (K) per cubic foot of air.

TABLE II.—EMISSION

The emission from radiators varies from 1·3 to 1·7
,, ,, ,, plain pipes varies from 1·7 to 2·2
It is proposed to adopt 1·5 B.T.U. per foot super of radiator per degree per hour.

Window area should include frames and sashes, i.e. wall to wall.

Wall (inner) may be ignored when the room or passage on the other side of it is warmed to approximately the same temperature.

Floors may be ignored when the room below is warmed.

We will again quote Mr. Jones, because the following is a point we wish to emphasize, namely, that even with such co-efficients, considerable experience is necessary if a really efficient heating plant is to be installed. Mr. Jones says—

> Allowances, at the engineer's discretion, will always be needed for the fluctuations in temperature of the heating agent and the cooling mediums, for N. and N.E. aspects, excessive exposure, altitude, the class of building materials, construction; the position selected for the boiler, pipes, radiators, etc. These, and many other things, will need some degree of intelligence if failures are to be avoided.

A further point which has to be considered before deciding what the total heat requirements are, is the amount of heat supplied by persons, machinery, light, etc., in the building, when such supply of heat would, of course, be deducted from the total building requirements.

## Hot-Water Apparatus.

We can now consider the heating apparatus, which, in the hot water system, comprises a heating boiler, radiators in the different rooms and passages, and the pipe work connecting up the radiators with the boiler.

This system has a very wide application, and although it is an ideal method for small and medium size buildings, it is also successfully adopted for large installations; but we will refer again to this last point later on.

The chief factors in favour of the hot water system are its great simplicity and economy in fuel. A simple illustration of this system is the so-called high pressure boiler in the ordinary kitchen range, where the fuel in the fire grate heats the water in the boiler, thereby increasing the volume of the water and so reducing its weight per unit volume. This action causes the colder water (which is heavier, volume for volume) to fall down from the overhead supply tank, and so

pushes the warmer water out of the boiler and up into the circulating tank or cylinder. This process of water circulation goes on continuously so long as the fire burns in the grate, and the heating boiler thus keeps the circulating tank full of boiling water.

Exactly the same process takes place with a hot water heating system, but in this case the radiators take the place of the circulating tank, and the boiler is of special design with its own fire grate, and generally arranged in such a manner that it requires firing only about twice or three times during the 24 hours.

Such a system is our first practical example of how the heat units of the coal are conveyed to the place where they are to be used for heating. The hot water, on arriving at the different radiators throughout the building, gives out to the rooms and passages a certain portion of the heat which has been absorbed from the coal burned in the boiler furnace. This heat is given out in different ways, and there are two principal methods of arranging the radiators.

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DIAGRAMMATIC VIEW OF "IDEAL CLASSIC" BOILER AND RADIATORS IN PRIVATE HOUSE

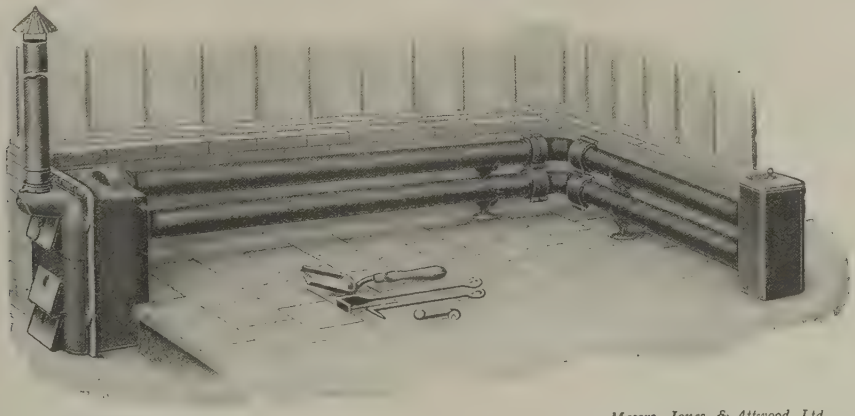
## Radiator Within the Room.

Firstly, the radiator may be placed within the room itself, when the following action takes place. The hot water within the radiator transmits its heat by conduction to the metal of which the radiator is made, when the outside surface of the metal radiator radiates a certain portion of such heat to the surrounding walls and contents of the room. The air which is in contact with the outside surface of the radiator is heated by actual contact with such surface, when it immediately rises, due to the fact that its volume has increased and the surrounding colder, and therefore heavier, air sinks down and pushes the warmer air upwards. This is the same principle as that which controls hot-water circulation already referred to. The result of this heated air rising gives a circulation of hot air throughout the room, termed convection currents, or heating by convection. From this we see that radiators function by

radiating a portion of their heat, and also by creating convection currents of heated air.

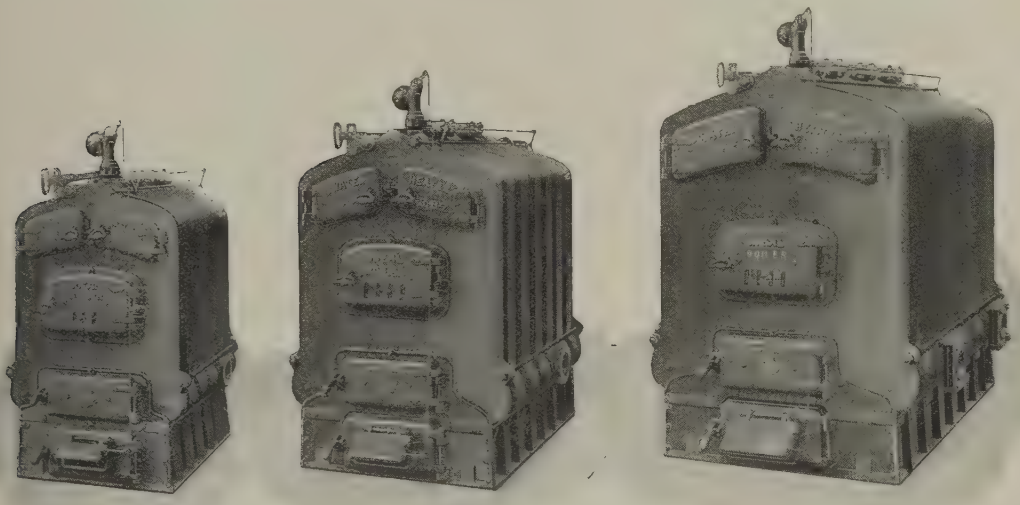
## Radiator Outside the Room.

Secondly, radiators may be placed outside the room to be heated. In this case they are completely enclosed in a suitable casing, and such casing is arranged in such a manner as to allow cold air from outside to pass over the radiator before entering the room to be heated. By this method the room is heated by convection currents of heated air alone, and at the same time this method forms an efficient means of ventilation, as proper arrangements must naturally be made for the exit of the heated air after its arrival in the room. In some systems, however, the air returns again to the inlet side of the passage leading to the radiator, and the same air is used continuously, or alternatively, a portion of fresh air being allowed to enter the inlet passage.



*By permission* *Messrs. Jones & Attwood, Ltd.*

SMALL HOT-WATER BOILER AND ARRANGEMENT OF HOT-WATER PIPES IN A GREENHOUSE



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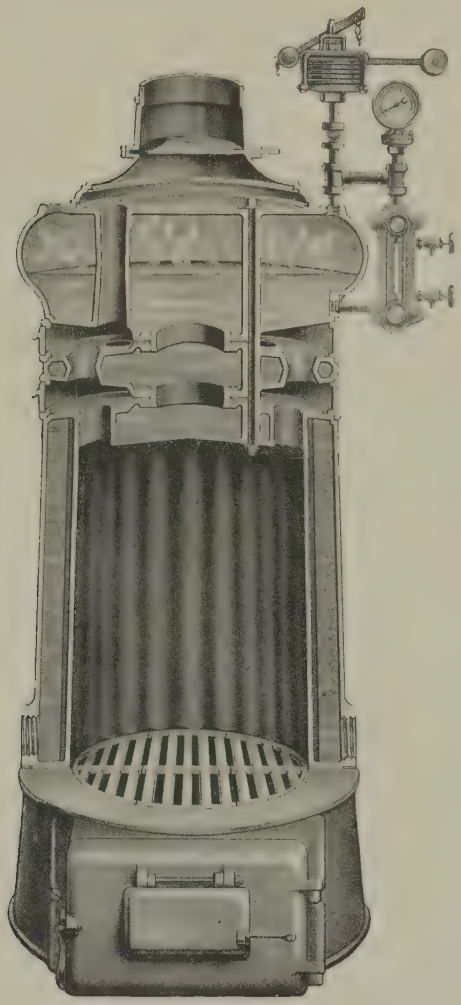
MODERN SECTIONAL HEATING BOILERS

## Surface of Radiator.

Another factor to be considered with the radiator is the nature of the outer or radiating

surface, as the painting of a radiator may very materially affect the transmission of heat. Surfaces



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SECTION THROUGH SMALL LOW-PRESSURE HOT-WATER BOILER

of a dull and dark finish are more efficient than surfaces of bright or polished finish. In Kempe's *Engineers' Year Book* it is stated that

A radiator painted with two coats of copper bronze was found to have the heat transmission reduced 24 per cent from the original cast iron. Aluminium, copper, and metal pigments in the bronzes reduce the heat transmission. Enamel, lead paints, and zinc paints almost all show no loss in heat transmission. Cast iron, wrought iron, and copper do not show a material difference in the heat transmission when painted with similar coatings.

## Boilers.

The boilers used for hot water heating are generally made of cast iron. Experience has shown that this material is quite satisfactory, and it has the great advantage of being conveniently formed into the most efficient design for heating apparatus; and, in addition, cast iron resists corrosion much better than mild steel, the material of which most steam boilers are made.

Broadly speaking, there are two types of hot water boilers. Firstly, there is the very small boiler used for such a purpose as the heating of an ordinary greenhouse, in which case the boiler is of the very simplest design. Secondly, there is the more elaborate boiler used for the heating of larger buildings. This latter is generally built up in sections, when a number of such sections are held together by means of long bolts, the water joints between the sections being made by inserting taper nipples in tapered circular holes, so that all joints are metal to metal. This makes a very convenient and efficient form of construction, and is one which has now become standard for the larger sizes of hot water boilers.

These boilers are designed with large fire grates, which are easily accessible for cleaning, and have a capacity for a six to ten hours' supply of fuel. Suitable provision is made for regulating the draught and air supply to the fire grate, in order to regulate the amount of heat passing into the heating system. For this purpose an automatic heat regulator may be fitted to the boiler, which operates automatically according to the temperature of the water in the boiler, and can be adjusted to keep the heating temperature throughout the building to the desired requirements.

## How Hot Water Circulates in a Building.

It has already been explained that water is heated by a circulating process. This fundamental principle holds good in all water heating systems. The water in the boiler itself is heated by the circulation of such water within the boiler. Immediately the water in contact with the fire is heated, it is forced to rise because the colder, and therefore heavier, water above falls and takes the place of the heated water. This newly arrived cold water, in its turn, is heated and a similar process takes place, the result being a continuous circulation of the contents of the boiler.

If, now, we imagine a pipe led away from the top of the boiler and carried to the top of the boiler-house, where it is then bent into a downward direction and returned to the bottom of the boiler, then in such a case it is not difficult to understand how the water in the down or returning pipe is somewhat colder than the water in the up or rising pipe, due to its being a longer time in contact with the atmosphere, and, therefore, such colder water being heavier than the warmer water in the rising pipe, will fall back to the boiler and

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A MODERN OFFICE

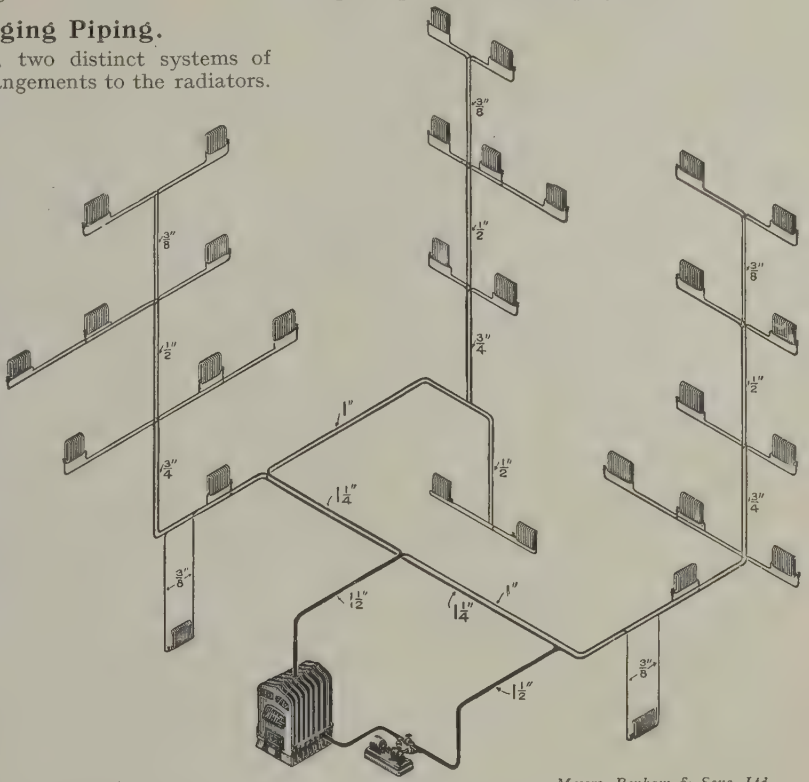
*Frontispiece*

push the hot water in the boiler up into the rising pipe; thus creating a continuous circulation throughout the boiler and outside piping.

The above example explains the whole principle of hot water circulation. It is only a matter of placing radiators at the required points in the piping system, in order to give the required amount of radiating surface for a particular room, to complete the heating installation.

## Systems of Arranging Piping.

There are, however, two distinct systems of running the piping arrangements to the radiators. These are known as the one-pipe and two-pipe systems. In the former case the radiators are tapped off the one pipe which leaves and returns to the boiler, that is to say two branches are connected from the main heating pipe to the inlet and outlet of the radiator. In the two-pipe system, the main flow and return pipe from the boiler are run side by side, and the inlet of the radiator is connected to the flow pipe, and the outlet of the radiator connected to the return pipe. Each system has its uses according to the design and extent of the buildings to be heated; but it should be recorded that the one-pipe system has been very extensively adopted and has obvious economic advantages.

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DIAGRAMMATICAL VIEW OF HOT-WATER SYSTEM, SHOWING BOILER AND RADIATORS, CIRCULATING PIPES AND CIRCULATOR

## Essentials.

Regardless of what system is adopted, there is a certain rule which must always be followed in all hot water systems. This rule is that every flow pipe must have a gradual rise from the horizontal after leaving the boiler. For this reason, the boiler must be placed at a lower level than the pipes and radiators comprising the heating system. If this system were not followed it would, of course, be impossible for the cold water to return to the boiler and so create the necessary circulation.

It is also essential to provide for the escape of entrapped air at the highest points in the system, such as the tops of all radiators, and for this reason some form of pet cock is generally provided. The system is not, however, a closed system, because it is necessary to provide for the expansion of the heated water, and to automatically make up for loss. For this reason an expansion pipe is carried to a point above the highest point in the heating system, and then connected to a small supply tank which is, in turn, provided with a ball valve and coupled up to the water supply main.

The above natural circulation of hot water may be speeded up, and the efficiency of the system increased by artificial means. This is done by placing a mechanically operated circulator in the return pipe, which acts really as a kind of pump and forces the water through the system. This method has many advantages, especially in the larger installations, as it enables smaller size pipes to be used, and the rule of giving the flow pipe a gradual rise may be ignored. In other words, the piping may be run in the most convenient manner to conform with the building construction, and in certain cases this may be a matter of considerable importance.

CHAPTER III

# STEAM HEATING

When steam is used as the heating medium, the apparatus required is very similar to that adopted for hot water heating. A boiler is required to generate the steam, and piping to convey the steam to the radiators throughout the building. The principles involved are also similar, so far as the amount of heat to be supplied at the different points is concerned, and also as regards the method by which the heat is ultimately distributed in the room, by means of radiation and convection currents.

Apart, however, from these points of similarity between the two heating systems, the treatment of a steam system is entirely different from that of hot water.

## Difference from Hot-Water Heating.

In the first place, it should be remembered that in steam heating we are dealing with a gas, whereas in the hot water system a liquid is the heating medium. In the case of hot water, the heat radiated from the surface of the radiator is dependent primarily upon the temperature of the water; and the number of heat units given up or radiated, shows a corresponding loss in degrees of temperature per pound of water.

In the case of the steam system, however, 1 lb. of steam contains approximately five times as many heat units as 1 lb. of water. Further, we have seen in the chapter on hot water heating, that what is termed the latent heat of steam is given up in bulk—as it were—immediately steam condenses into water. This means that 971·7 heat units are liberated every time 1 lb. of steam condenses into water, at the same temperature as the steam from which it was condensed.

This fact is, of course, the vital factor in steam heating, and such systems are designed so that the steam is only of sufficient temperature to be conveyed to the radiator to be heated—or, rather, supplied with heat to be radiated—when the steam condenses into water, gives up its large store of latent heat, and the hot water returns to the boiler to be again turned into steam.

It will, therefore, be clear that, although the hot water and steam systems each employ very similar plant, the functioning of each system is entirely different, and, therefore, the size and design of the layout of the plant is also very different.

## Radiation of Heat.

Considering the connecting pipes of a steam system between the boiler and the radiators, it will be understood that radiation of heat takes place from the surface of such pipes, just as it does from the surface of the radiators. This radiation, unless it is doing some useful heating, is a loss of fuel, but in the case of steam heating such radiation may be a very serious loss, because the drop in temperature may be sufficient to condense the steam back into water before arriving at the radiators. We have already seen that for every pound of steam condensed into water, 971·7 heat units are liberated, and this fact explains the seriousness of such loss.

## Pressure.

In order, therefore, to maintain steam as such in any heating system, it is necessary to generate it at the boiler to be of sufficient temperature to allow for the drop or loss in temperature while travelling from the boiler to the points of use, namely, the radiators. This is effected by having sufficient pressure in the boiler, because the temperature of the steam increases with the pressure. When sufficient temperature margin is left in this way, the only loss by radiation is the drop in temperature of the steam itself, and such loss would be on a similar basis to a like loss in a hot water system, that is to say the loss would only be a few degrees on the thermometer, always provided, of course, that the drop in temperature was not sufficient to condense the steam into water.

## Pipe Coverings.

To guard against excessive radiation losses, it is necessary to cover all steam pipes and fittings with some form of material which is a poor conductor of heat, such as felt, cotton wool, etc. It will be found, therefore, that in all steam heating systems the pipe-work and fittings which are not used for useful heat radiation are heavily covered with one of the many efficient coverings now on the market. These remarks apply also, of course, to the boiler itself.

## Counteracting Effect of Expansion.

Another item of importance in a steam system is the fact that there is considerable expansion in the pipe work when full of steam. Such expansion is likely to cause considerable trouble with leaking joints unless proper provision is made to counteract the effect of such expansion. It is not difficult to do this, and it is generally a matter of judicious arrangement of piping to allow for the elongation of the pipe to be taken by means of a spring in the piping itself. This will be clear if we imagine a long, straight steam pipe, and half way down its length it is bent at right angles and then carried round to form a half circle, and again carried on in the original straight line. This half circle, or loop, in the pipe gives the necessary spring or relief to take the pressure (due to pipe expansion) away from the joint connecting each end of the pipe to the heating system.

## Condensed Steam.

From what has already been said it will readily be understood that in all steam heating systems provision must be made for the condensed steam in the form of water to return to the boiler. The method of doing this is in the actual layout or arrangement of the pipe work. On paper, it is quite a simple matter, but in practice it is not always a straightforward job to arrange. The underlying principle is to arrange the piping with a gradual fall or incline, so that the condensed water flows by gravity back to the boiler.

## Systems of Steam Heating.

This point brings us to the different systems of steam heating. The principal methods in regular use are known as the one-pipe and two-pipe systems. If we imagine a simple case, the principles involved in all steam installations will be understood. Take, therefore, the case where the radiators to be supplied with steam are all on one floor and the steam boiler is below in a basement. In such a case it is necessary, first of all, to lead a steam pipe from the boiler and allow it to pass below each of the radiators, and finally to return to the boiler. This run of piping is what is termed a complete circuit, and is common to all heating systems where a boiler is used.

Now, if we imagine the steam pipe, after it leaves the boiler, being raised or carried to the maximum height necessary to supply the radiators, and then given a gradual fall all the way back to the boiler, it will be clear that all condensed steam will flow by gravity along the pipe line and eventually re-enter the boiler.

Bearing in mind the circuit of the main steam pipe, we find that in the so-called one pipe heating system, one pipe is tapped off this main circuit pipe for each radiator. The result is that all the condensed steam leaves the radiator (in the form of water) by the one pipe which carries the steam to the radiator. This water falls down into the circuit pipe and flows along with the steam being carried to the other radiators, and on back to the boiler.

In the case of the two-pipe system, two pipe connections are made to each radiator; one from the circuit pipe leading from the boiler, and one back to the circuit pipe returning to the boiler.

One would, perhaps, naturally conclude that the two-pipe system is a more business-like arrangement; but in practice the one-pipe system has made great progress and has been used for large installations. Although a relatively large pipe must be used with the one-pipe system—as it carries both steam and water—it has the advantage of being simpler to install than the two pipe, and with a carefully planned layout, gives excellent results.

There is one point which should be mentioned here, namely, the trouble with air locks in a piping system. All air must be expelled from the system if it is to work efficiently, and this is generally done by providing suitable pet cocks at the highest points, such as the tops of all radiators.

It is sometimes necessary to supply steam to a heating apparatus which is at a lower level than the steam boiler, and in such cases the water will not, of course, be able to return by gravity to the boiler, but will condense and remain in the radiator or other heating apparatus. To deal with this problem, what is known as a steam trap is used. This is a very simple piece of apparatus and works quite automatically. So long as steam is in contact with the steam trap, the outlet or discharge opening is kept closed; but when sufficient water has accumulated to reduce the temperature on the operating mechanism, the discharge valve opens and allows the water to escape. This action goes on indefinitely, and the hot water so discharged should be returned to the boiler as feed water, because the heat contained in such water represents so much fuel consumed.

## Vacuum System.

Before concluding this chapter on steam heating, reference should be made to what is known as the vacuum system, which has made great progress in recent years, and has some obvious advantages over the older pressure system.

In the pressure system, we have seen that the steam from the boiler has to push the air contained in the pipe work out of the system, and this is rarely if ever effected perfectly. The air collects in all sorts of places, and gives trouble, resulting in inefficient heating.

In the vacuum system, the process is—as it were—reversed, that is to say the steam is drawn through the pipe work by creating a partial vacuum at the end of the pipe work which is away from the boiler. The Webster system is probably the best known method of utilizing a vacuum for steam heating purposes. In this system the steam is circulated throughout a building at or below atmospheric pressure by means of a vacuum pump connected to the end of the return steam pipe. It follows that the circulation of steam is quite positive, to the most distant parts of an installation, and at the same time the air and condensed steam are automatically extracted.

One great advantage of the vacuum system is the fact that the temperature of a room can be regulated. With the ordinary pressure system such regulation is not possible; the steam must be either on or off, and if any attempt is made at regulation, the result is condensation of steam and water hammering.

The vacuum system is also a very efficient

method of using exhaust steam from a steam engine for heating purposes. When such a source of heat is available, it should always be used, because the greater part of the original heat of the steam still remains in the exhaust. This fact means that the cost for power with a steam engine under such circumstances is reduced to a mere fraction of what the cost would be when the exhaust steam is not used for some useful heating purpose. The reason for this will be clear from what has already been said about the latent heat of steam.

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HEATING AND VENTILATING A LARGE WORKS BY THE DIRECT CIRCULATION OF AIR

CHAPTER IV

## AIR HEATING

### Including Notes on Ventilation

A METHOD of warming factories which has made very rapid progress in recent years is to circulate heated air throughout the building; the heating of the air being effected by allowing it to pass over a series of steam-heated pipes.

This system of heating overlaps with the subject of ventilation, and in this chapter we propose to combine the two subjects in order to give as much material matter as possible.

### Principle of Ventilation.

The elementary principle of ventilation is that the air in any room or building should be entirely replaced by fresh air so many times over a given period of time, depending upon the number of human occupants, and also on the nature of their occupation. The open fireplace is a natural means of ventilation, the draught from the chimney drawing air into the room through any inlet, such as the door and windows. The same

principle is followed in various methods of ventilation where stationary ventilators or cowls are fitted to the roof of a building, and air ducts conveyed to the rooms to be ventilated. With such arrangements, the inlet for the fresh air may be in the walls of the room, usually arranged at a convenient height to avoid unpleasant draught.

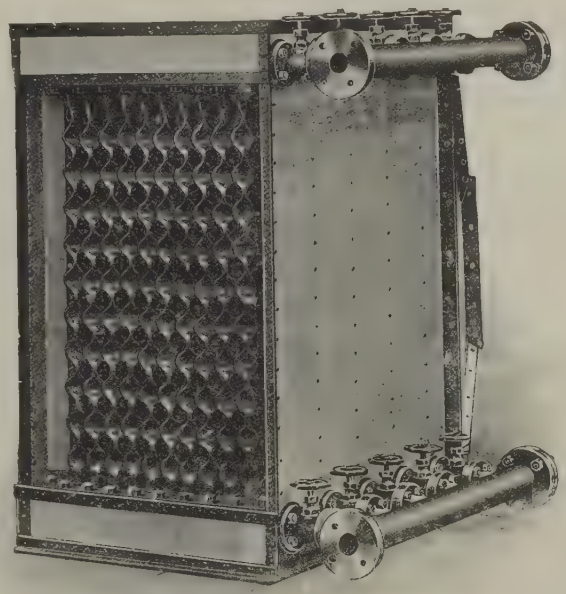
Our present day congested modern conditions, however, generally require some more positive system of ventilation, and it is for this reason that the many mechanically operated ventilating systems at present on the market have made such great progress. Individually, we live by inhaling the oxygen of the atmosphere, which performs its function of combining with the hydrogen and carbon from the food we eat, and is then exhaled as carbon dioxide gas. This gas, known as $CO_2$, is quite incapable of sustaining life, and after the air of a room contains some 12 parts in 10,000 it is said to be past the stage when it is capable of fulfilling normal human requirement. It will readily be understood, therefore, that the air in a room of given dimensions will require to be completely changed in a given time, in order to keep the percentage of $CO_2$ in the atmosphere at a normal figure, and also that such change of air will require to be more frequent the larger the number of persons present in the same room.

## Ventilating Apparatus.

With regard to the actual apparatus used for mechanical ventilation, this consists of a fan for circulating the heated air; the necessary pipes or ducts for delivering the warm air to the points of distribution; and the steam coil, or nest of steam-heated pipes, over which the air from the fan passes on its way to the rooms to be heated. The source of steam supplied may be from any available boiler, or the exhaust from a steam engine. Frequently, a small steam engine is used to drive the fan, when the exhaust steam is used for heating the steam coil, and this makes a very convenient, as well as very economical, arrangement, as will be appreciated from what has already been said concerning the latent heat of steam.

In operation, cold air is drawn in from the outside of the building by means of the fan, a suitable inlet being arranged for this purpose, and fitted with dampers for regulation purposes. This cold air passes over the heated steam pipes, and is raised to the necessary temperature for supplying the building. The fan forces the heated air through the system of ducts to the different points in the building where the heated air leaves the delivering ducts, where it is diffused throughout the room. Such outlet points are arranged symmetrically throughout each room in order to give an even distribution of warm air.

The temperature of the air may be regulated with precision, as the steam-heated coils are arranged in sections, and each section is separately controlled by its own steam valve. This arrangement enables one or more steam sections to be cut out, and so reduce the total heat of the steam coil, and at the same time economize in steam.



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PATENT AIR HEATER, SHOWING CORRUGATED TUBES

Another important feature of this system is that the steam-heating section may be entirely cut out, and cool atmosphere air circulated; and this is what happens during the summer months.

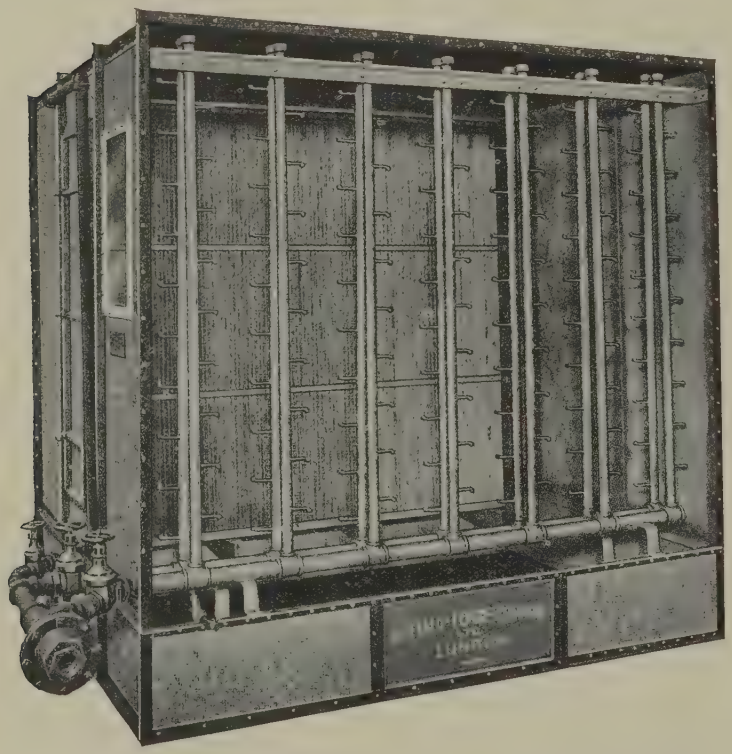
As a ventilating system, it will be clear that the method is positive, and there can be no question about the vitiated air of a room being removed, and replaced by incoming pure air. The actual number of times per hour in which the volume of air in a room is changed will depend upon the capacity of the fan; for example, assuming that the fan is capable of supplying in one hour a volume of air equal to the volume of

air within a room or building, then it follows that the whole of the air within such building will be changed each hour. The number of times such change should take place will depend upon the number of persons in the building, and the nature of their occupation.

## Systems of Distribution of Air.

There are two distinct systems of distributing the warm air in a building when a positive method is used. One is to re-circulate the air within the building over and over again, and the other is to draw the supply air entirely from outside the building. The ideal arrangement is considered to be a combination of these two methods; that is to say, the air within the building is re-circulated, and part fresh air is drawn in from the outside atmosphere.

In the first case it will be understood that there is practically no ventilation, in so far as the vitiated air of the building is not replaced by fresh air. In the second case the whole of the cold air has to be heated, which means, of course, that fuel has to be burnt in the boiler to supply the necessary steam. The combination of the two systems, therefore, gives heat, ventilation, and economy. In addition, there is another point in the combination system, namely, a slight pressure is created within the building, due to the extra air drawn from without the building. This has the effect of keeping out exterior factors such as fogs, dust, and, of course, the cold air. This is what is known as creating a plenum, or pressure. The air distributing ducts may be arranged in any convenient manner to suit the class of building. They may be concealed within the floor and walls, or, as is more general in workshop practice, cheap galvanized sheet iron pipes may be run overhead. Whatever system is used, the outlets for diffusing the warm air are brought to a point which is well above the heads of the occupants of the building.



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VIEW SHOWING AIR WASHER AND HUMIDIFIER, WITH END PLATE REMOVED

## Humidity.

There is one very important point which it is convenient to deal with here, and that is what is known as humidity. This is a factor which has not had its full share of consideration until recent years, but to-day humidity is considered to be of even more importance than the actual temperature of the atmosphere within a building.

What is meant by humidity of the atmosphere, or of the air in a building or room, is the quantity of water contained in the air, in the form of vapour. The maximum amount of moisture which a unit volume of air can hold is dependent upon the temperature of the air, the capacity increasing with an increase in temperature. This fact accounts for the so-called dryness of an atmosphere.

The ideal condition is to retain the air at the humidity of normal atmospheric conditions, and any loss of moisture due to increase in temperature is very harmful, as it dries up the mucous membranes of the body, and it also lowers the sensible temperature of the room.

To obtain the conditions of natural humidity

it is necessary to supply the moisture required when the air is heated, and this is done in a very simple manner, and at the same time it emphasizes one of the important features of the air-heating system.

The apparatus consists of a chamber in which is fitted a large number of water nozzles, capable of delivering the water in the form of a very fine spray. The effect of all these spray nozzles is to completely fill the chamber with water spray, and it is through this atmosphere of water spray that the air passes before it is delivered to the building. The effect of this process is also to remove from the air all impurities such as soot, dust, etc., and the correct degree of humidity is attained by varying the spray temperature.

## CHAPTER V

## GAS HEATING

In considering the use of gas as a heating medium, a very important subject is opened up, and in the writer's opinion combustible gas is destined to play a fundamental part in the heating problems of the present generation.

We can only touch on the subject here, but it is important to try and see the matter in its right perspective. In the past we have been satisfied to burn our raw coal in furnaces; either in the open grate or in boiler furnaces, and so obtain our heating requirements.

In following this somewhat barbarous method we have deprived ourselves of all the valuable contents of the coal, usually termed by-products. As the recovery of these contents by modern methods may easily double the original value of the raw coal, the term "by-product" hardly meets the case.

### Importance of Coal.

Raw coal is a rich storehouse of many of our present-day needs. During the late war we know that coal, through the medium of our gas-works, supplied the famous T.N.T. for the Army and Navy, and if we follow the different stages through which coal and its constituents pass at a modern gas-works, we find the following products produced: Toluol, benzol, sulphate of ammonia, sulphuric acid, naphthalene, aspirin, carbolic acid, pyrogallic acid, creosote oil, tar, coke. These do not by any means exhaust the list, but they serve to give some idea of the value of the coal constituents.

The question may quite naturally be asked: "Why are we burning raw coal in furnaces and allowing all these valuable products to go to waste?" The answer probably is that we move from stage to stage by an evolutionary process which is slow; we cannot change our complex modern life in a day. There are, however, many indications which show that we are slowly departing from the stage of using raw coal as a direct heating medium.

### Low Temperature Process of Carbonization.

One of the most outstanding indications of this is the great amount of time and money which has been expended during recent years in developing what is known as the low temperature process of carbonization. The fundamental idea in this process is to carbonize, or break up into its constituents, raw coal, by using a low temperature. The actual carbonization takes place in a heated retort, regardless of what process is used; but in

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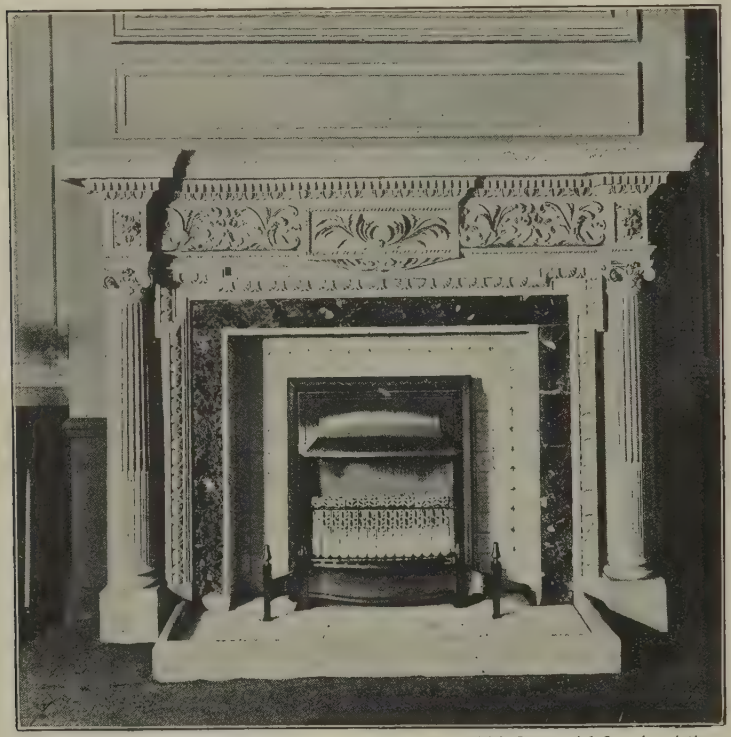
COKE-HEATED BOILERS SUPPLYING HOT WATER FOR HEATING SYSTEM

the ordinary gas-works, or in coke ovens, a relatively high temperature is used. It has been proved on large scale plants that, by using special low temperature retorts, a very considerably higher yield of oils can be obtained from the coal, and estimates based on the work so far done show that our fuel-oil and motor spirit may be obtained from this source.

After all these valuable products of the coal are recovered, there remains, of course, the gas, and also the solid fuel left behind in the retorts. This latter is the coke of the gas-works, and a somewhat similar product from the low temperature retort, but with the great advantage that it ignites and burns readily in an open grate.

If, therefore, we try to visualize the trend of development, we see our raw coal first being carbonized, and many of our present-day needs recovered; at the same time we see our supplies of solid fuel for firing steam boilers, and industrial furnaces, and gas for the many industrial and household uses for which it has proved an ideal fuel. In addition to all this, we will be relieved of our present very heavy annual expenses caused by smoke and soot emitted from chimneys using raw coal.



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TYPICAL EXAMPLE OF A MODERN GAS FIRE

## Gas for Heating.

Considering now the actual application of gas for heating, there are two points which stand out very prominently, namely, efficiency and convenience. Gas is an efficient fuel because in practice it can be mixed with air to give a combustible mixture which results in almost perfect combustion. Such a condition is practically impossible with solid fuel. The convenience of gas is self-evident. It is ready for service by the turning of a tap, there are no transport charges, and the supply is virtually unlimited.

Broadly speaking, gas heating (that is, for the warming of buildings) may be divided into two sections, namely, the gas fire, and the gas-heated radiator.

The modern gas fire is doubtless quite familiar, and calls for little comment here beyond stating that very considerable thought and experiment have been devoted to its development, and to-day the gas fire is a very efficient piece of apparatus as a dispenser of radiant heat. This is a point to be noted, because we are authoritatively informed that radiant heat is the ideal for hygienic conditions.

## Gas Radiator.

The gas radiator is of two types; what is known as the gas-steam type and the steamless type. Incidentally, the term "radiator" is not strictly correct, because very little heat is actually radiated, the room or passage being heated by convection currents of heated air.

The gas radiator has a similar advantage to the gas fire in that it can be conveniently fixed at any point, by simply running a relatively small gas pipe for the supply. In this respect there is a great advantage over either the hot water or steam system, when conditions are such that it would not be convenient to run an ordinary heating system set of piping.

## Gas-Steam Radiator.

The construction of the gas-steam radiator is

somewhat similar to the ordinary steam type. The base is, however, specially arranged to receive a fixed amount of water, and it is the function of the gas burner to evaporate this water, when the radiator transmits the heat from the steam so generated to the room to be heated. The depth of water in the radiator base is an important point, and a gauge glass is fitted at the side of the radiator to show the amount of water therein. No greater quantity of water should be allowed to enter the radiator than if all were converted into steam would keep the pressure generated well within the safe working limit of the strength of the apparatus. Such an arrangement acts as an automatic safety valve, and avoids all possible danger from explosion.

A further automatic device is arranged for, in order to avoid any undue internal pressure, and to prevent overheating of the air and waste of gas. This consists of an automatic valve which is attached to each radiator, so that the gas consumption is reduced when a certain pre-determined and very slight pressure has been reached.

## Ventilation.

It is important to refer again here to the question of ventilation, as it will be realized that, when gas radiators are used, as a general rule, no provision is made for the direct transference of the combustion products to the outside atmosphere, but with proper ventilating arrangements no such special arrangements are necessary. We will, therefore, record some extracts on this point, taken from an article which appeared in the *Journal of Gas Lighting*, by Mr. H. James Yates, F.C.S., M.I.Mech.E. When referring to gas-steam radiators he says that—

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OFFICE HEATED BY GAS RADIATORS

Section 6 of the Factory and Workshops Act states that the means employed to heat a workshop must be such as shall not interfere with the purity of the atmosphere; and from time to time doubts have arisen in official quarters as to the position of flueless gas radiators in relation to this clause. . . . Providing the combustion itself is perfect—i.e. that no carbonic oxide is produced—the matter would seem to resolve itself into practically a question of the number of parts of carbonic acid per 10,000 parts of the atmosphere of the apartment.

The normal quantity of carbonic acid found in the air is, as is well known, from 3 to 5 parts per 10,000. Indoors,

the respiration of the occupants naturally adds to this figure; and the Departmental Committee on Ventilation in Factories recommended, in 1902, that the maximum limit of carbonic acid permissible in the atmosphere of workshops should be fixed at 12 parts per 10,000 in the daytime and 20 parts after dark, where gas or oil is used for illuminating purposes. . . . It is important to remember, in passing, the wide distinction, as regards effect on health, between carbonic acid produced by respiration and carbonic acid produced from inorganic sources. Carbonic acid produced by respiration is accompanied by a certain proportion of organic matter; and it is this latter which is the really serious factor to be guarded against. On the other hand, carbonic acid which results from inorganic combustion does not contribute organic matter to the atmosphere.

Mr. Yates then proceeds to give details of a number of experiments made with gas-heated steam radiators, and states that there has been established "a definite constant factor"—five parts—

for the contribution of carbonic acid by the gas-steam radiators. In most cases the total proportion of carbonic acid in the room at the end of the day (including the five parts contributed by the radiators) has fallen substantially short of the maximum of 12 parts per 10,000 put forward by the Departmental Committee. Where the analysis shows the total amount of carbonic acid to be excessive, it has invariably proved that the particulars in the report showed the ventilation conditions to be inadequate, except in one or two cases where the premises were found to be entirely unsuited for this form of apparatus, and where they would never have been installed had the makers been consulted. . . . In the course of these analyses, an interesting sidelight has presented itself. In certain cases, the proportion of carbonic acid in these instances has proved to be actually less at the close of the day's full use of the radiators than on the previous day without them. This is due to the sluggishness of the normal ventilation being stimulated by the heat of the radiator.

Another investigator states that: "A ward or other public building in which gas radiators cannot be used with advantage is improperly ventilated." Indeed, the hygienic nature of gas radiators is testified to by the fact that they are found in very frequent use in hospitals, being specially suitable for halls, corridors, staircases, waiting-rooms, and out-patients' departments—wherever, in fact, warmth is required intermittently without the necessity for putting the whole of the central heating system into operation.

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CASH OFFICE HEATED BY FLUELESS GAS STOVE

## Steamless Radiator.

The steamless radiator, like the gas-steam type, is self-contained and automatically controlled as to its gas consumption, and it follows much the

same line of construction, except that instead of first converting the calorific power of the gas into steam, and using it as the heating medium, the steamless radiator depends upon hot air alone for its heating power. This is a very effective and economical piece of apparatus, and the writer is of opinion that greater use should be made of the use of distributing warm air than has been done in the past. It is a very convenient means of maintaining an even temperature throughout a room.

## Condensing Stove.

Another type of gas heater is that known as the condensing stove. This apparatus is fixed in a similar manner to the gas radiator, and is self-contained and requires no flues. It consists of a gas fire giving out radiant heat, and suitable arrangements for condensing the vapour of combustion, the gas fire itself being well guarded.

This type of heater has been very largely used for the heating of shops and large stores, but would not be recommended for private houses, except in large halls or on staircases, where there is ventilation. They have the advantage over a central heating system of relatively low first cost and convenience of fixing, and also that they can be put into service at a moment's notice and shut off when not required.

## Importance of Gas.

We have emphasized in this section the trend of development in the extending use of gaseous fuel, and, in addition to the heating of buildings, we may depart from our present subject to say that there is hardly a modern industry to-day which does not use gas for some heating process in one or more of its departments. We cannot enter into details here, but this fact reveals the great industrial importance of gas as a heating medium.

Another sign of the times on this point is the fact that a large modern building in the heart of the City of London has been designed to carry gas pipes to every room in the building. That is to say, the architects arranged in their original plans to carcass the whole building with gas pipes of suitable size, in order that gas heaters may be installed at every required point.

# CHAPTER VI

# ELECTRIC HEATING

Electricity as a heating medium has many unique claims, but like every other system it is a matter of balancing up the factors for and against in any individual case.

There are no practical difficulties in using electricity for almost any heating purpose, and to-day its applications are as numerous as any other medium. The chief difficulty to more rapid progress, however, is the relatively high cost of current, and it is difficult to see how there is to be any considerable reduction in the cost in the immediate future.

## Relatively High Cost.

It is not difficult to understand why electricity is relatively costly, when compared direct with fuels for heating. Electricity is not a fuel—incidentally, we do not know what it is; we do know, however, that it is only a medium for conveying the stored-up heat in raw coal to the place where it is required for useful work. During the conversion of the raw coal into electricity, many heat losses take place. In the first place, the coal is burned in the boiler furnace to generate steam, the steam rotates the steam turbine, and the turbine rotates the electric generator. At each of these points heat losses take place, with the result that the electricity generated at the power station contains only a relatively small percentage of the heat contained in the original raw coal, and, in addition, there are further losses in conveying the electricity from the power station to the consumer.

Bearing these facts in mind, it will readily be understood that any direct comparison between electricity and combustible fuel will always show the latter to be vastly more economical.

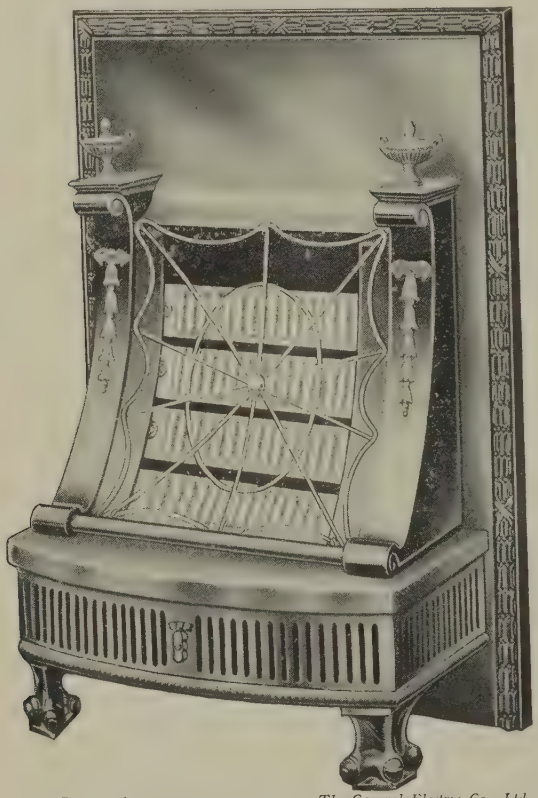
## Advantages.

These are fundamental facts which cannot be ignored, but, on the other hand, every problem will eventually be decided on a commercial basis, and in spite of the disadvantage with which electricity starts out as a heating medium, there are many applications where it can be adopted on a commercial basis. We would mention here that some of these applications are such that electricity has no competition, but we must confine this section to the heating of buildings.

When, therefore, electricity is under consideration as a heating medium, there must be put against the cost of current consumed the savings which would be effected assuming that some other system was discarded or not adopted. These factors in favour of electricity may be summed up in the words "convenience and cleanliness," and it is very important that such factors should be given their full commercial value. This point is emphasized because, in practice, they are not given the full consideration they deserve. They are treated apparently as something which might happen; but this attitude is entirely wrong, and the only way to arrive at the most efficient solution of any heating problem is to take the wide view and carefully balance up all the factors for and against.

## Principle of Electric Heating.

The principle of electric heating is relatively simple. When a current of electricity is passed through a metallic wire of high resistance, heat is generated in overcoming such resistance, and it is



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ORNAMENTAL CAST-IRON ELECTRIC FIRE

this heat which is utilized for useful heating purposes. The same principle applies to the ordinary electric lamp, when the filament through which the current passes becomes incandescent, due to the high resistance.

All electric fires and heaters, therefore, are merely coils of some special metal possessing a high resistance to the passage of the electric current. The amount and size of such coils or windings determine the amount of electricity consumed, and, therefore, the amount of heat generated.

## Design of Apparatus.

This is such a convenient method of generating heat that it becomes a simple matter to design electric heating apparatus to take almost any form desired. There are a great variety of designs for electric fires, including the many designs in the form of imitation fire grates, and imitation wood logs. The same principle is adopted in other heating apparatus, such as cookers, domestic irons, etc.

## Electric Radiators.

In addition to using electricity to heat such wire coils, and so give out radiant heat, there are electric radiators designed which, in appearance, are very similar to those used for steam and hot water heating. Such radiators, like the gas radiator already described, are self-contained and only require to be connected to the supply mains, as in the case of gas, when a resistance inside the radiator heats the water, which results in a hot water radiator heated locally.

Where electricity is generated at low cost, such as at some of the hydro-electric plants in Europe and America, the current is very largely used for heating purposes. In some cases, relatively large boilers are heated electrically, both as water

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COLUMN TYPE ELECTRIC HOT-WATER RADIATOR

heaters and for steam raising. The current in such cases is passed through a resistance within the boiler, or else the current is actually passed through the water. The latter method has proved to be a very efficient steam generator.

SECTION 5

# The Planning and Equipment of Premises

CHAPTER I

## MODERN SHOPFITTING AND STORE PLANNING

By E. W. Vaughan

The aspect of the streets in every shopping centre of any importance has changed considerably during the last half-century, and is due principally to a period of renaissance in shop-front design, owing to the ever-increasing competition amongst retailers, the development of the great departmental stores, and the rapid spread of multiple shops.

This modernity began in America, influenced, no doubt, by the rapidly increasing population, and the consequent demand for better shopping facilities. Thence it spread to England, France, Germany and other countries, until, to-day, stores planned and equipped with every convenience and facility for the perfect service and comfort of customers are to be found in almost every town and city of the world.

In England, as might be expected, London still leads the way in the design and construction of its storefronts, as befits the great shopping centre. But the example set is gradually and surely taking root in the smaller towns, with the result that the progressive trader in the provinces is reaping a new harvest of prosperity from his enterprise.

There is, nevertheless, considerable room for improvement in many shops, both in London and in the country; the blame resting to a great extent on the high prices ruling immediately after the Great War, to the dearth of building materials at the time, and to the scarcity of money. To-day there is no longer the need for refraining from sinking capital in the improvement or modernization of old premises, bearing in mind the fact that such alterations represent not only a sound investment and lasting advertisement, but invariably result in an increased turnover from a better class clientele.

### The Site.

A review of the history of many of the large emporiums of to-day reveals the fact that the majority have grown from small beginnings, one of the principal factors of success being the choice of the site of the original shop.

Obviously, the best position is a corner site in a busy shopping centre. But, as these are much sought after and command correspondingly high rentals, the smaller retailer cannot do better than pitch his tent in the suburbs, as near as possible to a terminus, or in a neighbourhood where the population is growing with increasing housing accommodation.

The site chosen must be one easily accessible to customers, and much depends on the nature of the trade and on the class of the population from which the customers are to be drawn; and it must be remembered that the design of the shop-front, position of entrances, and general arrangement of the interior are dependent on the position available, frontage, ground space, and shape of the site.

### Choice of Materials.

The nature of the business largely determines the choice of materials to be employed in the construction of the shop-front and interior equipment. They should, moreover, be chosen with a view to upkeep and labour-saving, where expense is a consideration. Ornamental metal work, for example, if not easily accessible, entails an endless amount of labour in polishing, which reflects, in due course, on the overhead charges of the establishment.

Butchers' and fishmongers' shops call for the use of materials capable of constant cleaning and impervious to stains, dirt and rot. The ideal condition is to employ closely cemented tiles, granite or marble for the base—materials which are practically indestructible—with pilasters of metal, marble tiles, ceramic or mosaic for the entrance lobby, with ordinary concrete for the floor, and tiles for the interior walls. The premises can then be thoroughly cleansed with a hose without the risk of damage or deterioration by rotting as in the case of wood.

For other classes of trade there is a more elastic choice of materials. Mahogany, oak and other hardwoods are equally to be recommended, where the individual preference is for wood. The use of

wood, however, is rapidly diminishing, metal being the most popular framework employed for the shop-front of to-day, in conjunction with granite or marble for the base.

A few years ago the cost of metal was too high for the pocket of the smaller retailer, but nowadays metal shop-fronts can be erected at a reasonable figure; and bearing in mind the fact that metal long outlasts wood, the slightly extra initial outlay is more than recovered in the course of time. This is especially evident in the case of the business passing from father to son, from generation to generation, where repairs to the shop-front every few years amount to no mean item in the cost of the upkeep of the premises.

The choice of metal rests principally between brass and bronzed metal. The former requires constant attention to keep it bright and clean, whereas the latter merely needs a little occasional rubbing to remove accumulated dust, the metal itself toning gradually to bronze colour through the action of the atmosphere.

For lobby floors ceramic, mosaic, or marble tiles should be employed in every case, as these materials are not greatly affected by changes in climate and will, moreover, withstand a considerable amount of wear and tear through the constant traffic of customers.

## The Frontage.

Generally speaking, a modern shop-front should have a frontage of at least 16 ft. to 18 ft., with a lobby as deep as the premises will conveniently allow.

The base should not be too high, nor the glass line too near the pavement as, in the case of a window reaching almost to the ground, there is the constant risk of the windows being smashed by careless pedestrians. Nine inches above the pavement level is a reasonable height, but if that is not considered sufficient, the height should not exceed 15 in., except in shops devoted to the sale of foodstuffs.

It must be remembered that every inch taken from the space of the window frontage detracts from the value of the window itself as a medium for displaying merchandise to the public.

Where there is a minimum of frontage, the shop-front is of first importance. In such cases it is often possible to include a room at the rear of the premises or even, by the use of light and inexpensive ironwork, to cover in a yard at the rear and thus provide additional floor space for the shop interior.

But the only way to attract customers *into* the shop is by making the utmost use of every available inch of the limited window space, and therein lies the whole art of shop-front design.

We will suppose, for example, that a draper has a total frontage of only 22 ft. In the days before the importance of window displays was fully realized, no difficulty existed. A window on each side, a door in the centre, and the job was finished.

## Windows.

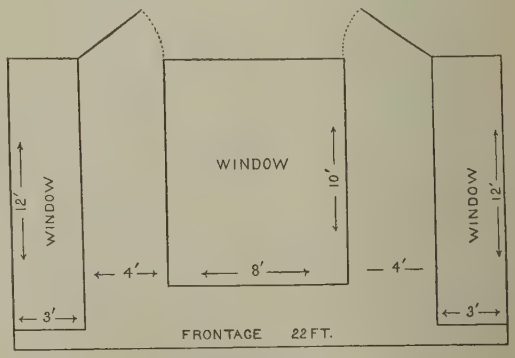
But to-day things are different, and the problem is: first, how much space can be allotted to window enclosures without overcrowding the interior; and secondly, how best to employ the space, granted realization of the necessity for exhibiting one's merchandise in a way that will arrest the attention of the passer-by and entice him or her into the shop?

It must also be borne in mind that in determining the size of the window glass, the wind pressure to be sustained must be taken into consideration; for, as the thickness of the glass is uniform and does not increase in proportion to its area, its strength naturally diminishes considerably as the area is increased. This is remedied by the use of metal sash-bars, which are designed nowadays to allow for expansion and contraction, while permitting the plate glass to withstand considerable wind pressure. The narrower these are the better, so that they do not obstruct the view, and permit an almost uninterrupted view, from any angle, of the goods displayed in the windows.

Now, in the case where the window frontage and entrance door are flush with the street—after allowing 4 ft. for the doorway—the shopkeeper has but a bare 18 ft. of window run for the display of his wares. In such circumstances, it is obviously impossible to exhibit more than a very limited number of articles, and much custom must be lost thereby.

## Plan No. 1.

A glance at plan No. 1 will show how this window run can be increased to more than three times the amount, simply and inexpensively.



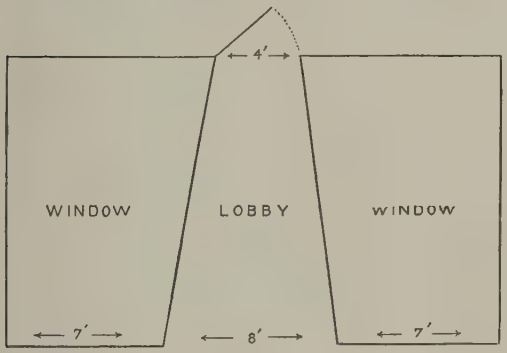

PLAN NO. 1

In the first place two side windows are provided. These can be used for smaller merchandise, such

as gloves, laces, ribbons and underwear, leaving the central window enclosure for the display of millinery, coats, blouses, etc. Then in sale times, the effect of the two doors will make itself felt, by obviating the congestion of traffic so common during the busy shopping seasons. Moreover, the whole appearance of the shop has become more imposing, and consequently more attractive to the vast majority of shoppers who, whatever their circumstances, naturally prefer to make their purchases in a shop which has some pretensions, at least, to being smart and progressive. In short, nothing is lost, but there is everything to be gained, by such a transformation, while instead of 18 ft., the trader has 58 ft. run of window space at his disposal.

## Plan No. 2.

If such a method of remodelling is beyond the means of the retailer, plan No. 2 shows a way of altering the premises by setting back the door and creating a lobby. While not so much extra window space is gained as in the other method,



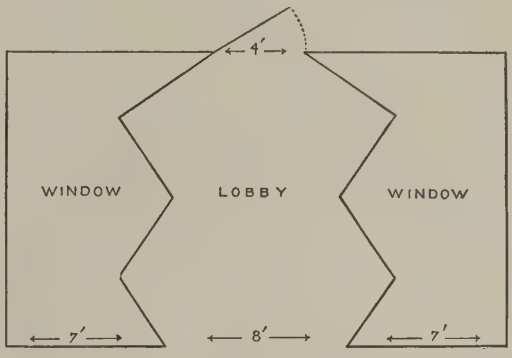

FRONTAGE 22 FT

Plan No. 2

the advantages of this arrangement over the old way are apparent. The glass area is increased and light is admitted to the window enclosures, with the consequent advantage that more merchandise can be exposed to the public, and attractive displays arranged to catch the eye of the shopper. The lobby itself has a certain effect in diminishing the congestion in the doorway, while on wet days, shelterers from the rain will be compelled to look into the windows and chance sales may result.

## Plan No. 3.

A more elaborate scheme is illustrated in plan No. 3. Where the frontage space is small, but the floor space of the interior can conveniently be increased, and an extra depth allotted to the window, this method has its distinct advantages. It consists of recessing the lobby windows into bays, thus increasing the window run considerably, and permitting the separate panels to be used for the display of different kinds of goods. In effect, a miniature arcade is created within the limited space at disposal. With a larger frontage, and a consequent widening of the bays, show



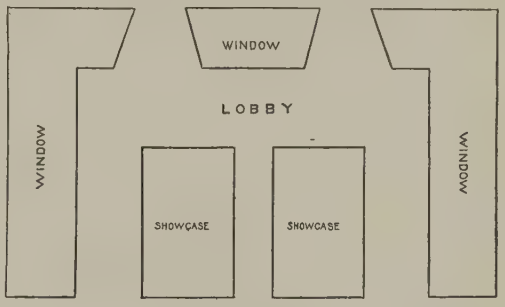

FRONTAGE 22 FT

Plan No. 3

cases can be placed in the centre of the bays, without in any way impeding the progress of the customers. The main disadvantage of such a structure lies, of course, in the cost. Plate glass is expensive, and an extravagant use of it, while necessary in a high-class locality, makes the cost almost prohibitive to the man with limited means.

## Plan No. 4.

Where it is proposed to reconstruct two shops standing side by side into a single emporium, it will be found that, as a rule, the arcade method will give the most satisfactory results. Plan No.




Plan No. 4

4 shows a type of front rapidly becoming popular with drapers, milliners and outfitters, although it is equally suitable for jewellers, cutlers and other trades.

The window proper is converted into three bays —two large side enclosures and a smaller one set between the two entrance doors. A large lobby is thus formed, in which show-cases are built. Where supporting piers exist, these can usually be built into the show-cases.

The windows at the side are large enough to permit individual displays of large stocks, such as gowns and ready-made goods, while the lobby show-cases allow the exhibition of smaller articles, this frontage is constructed of more imposing dimensions and in a more elaborate manner than that of our plan, it well demonstrates the advantages of planning the shop-front on such lines, where space permits and expenditure is not the primary consideration.

The use of the arcade type of shop-front is gaining ground with many of the larger stores in neighbourhoods where rents are high and additional frontage hard to obtain. By creating an

NOTE THE INGENIOUS USE OF DOMED-TOP ISLAND SHOWCASES—BUILT ROUND THE SUPPORTING PILLARS—TO FORM AN ARCADE

without interfering with the remainder of the window contents.

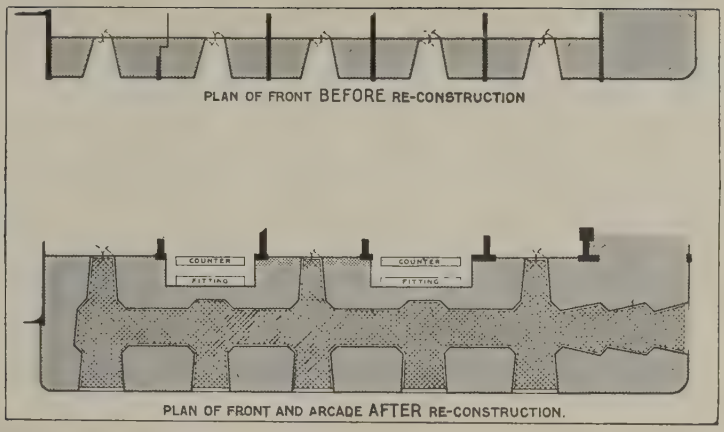
It will thus be seen that such a floor plan affords not only the maximum amount of display space, but also gives a large inviting vestibule in which the prospective purchaser may leisurely inspect the contents of the windows without being jostled by a passing crowd.

## Typical Examples.

A typical example of this style of shop-front is that of Messrs. Stagg & Mantle, a corner of whose premises is illustrated on this page. Although arcade, or aisle, with a vestibule between, a double row of display windows is secured. Especially is this so with large emporiums.

A case in point is that of The North London Drapery Stores, in Seven Sisters Road, London.

The front of this establishment had a run of about 140 ft. before the replanning. It was decided to build an arcade, although the reconstruction necessitated the removal of all party wall divisions back to the main building line to gain the necessary depth. The spaces of the five doorways of the old shop were converted into open entrances to the arcade with large show-cases



*By permission* *E. Pollard & Co., Ltd.*

A Reconstructed Shop Front, Showing Arcade

between. Behind these the actual window enclosures were constructed, with now three doorways giving direct access to the interior of the store.

The result of the reconstruction was an arcade extending practically the full length of the frontage, with a total window run of nearly four times as much as that of the original front.

It is obvious, therefore, that an arcade shop-front is the ideal type for a busy shopping neighbourhood, or districts where it is essential to display the maximum assortment of articles to suit the vagaries of the populace.

## Corner Sites.

With regard to a shop occupying a corner site, the main problem lies in the treatment of the angle. With large stores the solution is simple, for there is not the same difficulty over entrances as in the case of the single shop.

In the majority of cases the corner is employed for show purposes, by means of either a bent glass or three-cornered flat window. A notable exception is Messrs. Whiteley's, of Westbourne Grove, where one of the main entrances is situated at the corner, but in this instance, owing to the open approach and wide space in front and the imposing design of the whole building, the position of the entrances could not have been chosen better.

In general, it is found most satisfactory to plan the small shop with a view to as spacious an entrance on the corner as possible, paying due regard to its window possibilities.

Where maximum space is required for display purposes, the doorway should be recessed, and a sloping lobby formed. It will then be possible for shoppers studying the shop windows on the two main fronts to see through to the entrance. Similarly, a clear view can be obtained from the lobby itself. If necessary, a show-case can be built at the front of the lobby, in a central position, for showing small articles, and, with sufficient gangway left on either side and at the rear, it will not inconvenience customers entering the store. The front of this case may be square, but generally speaking, the use of bent glass is to be preferred, owing to its more finished effect.

## Entrances.

In arranging the main entrance to a store of any size, it is important that this should be situated in such a position that free access to the main departments, that is to say, those in which the staple goods of the establishment are handled, is given.

The customers have then no difficulty in locating these departments, and the work of the staff in directing them will be considerably facilitated.

Where facilities exist for providing subsidiary entrances to specialized departments, these are to be recommended, as a great number of people seeking, for example, the haberdashery department in a large establishment, dislike the effort and bother of wandering through the main store when making a hurried or small purchase. The easier their shopping is made for them, the more they will appreciate it.

With regard to the doors themselves, experience has shown that double action swing-doors are to be avoided, as tending to cause collisions between persons entering and leaving the premises, jamming of fingers, and so on. All doors should be of single action, and of a width sufficient for the comfortable passage of a customer inclined to obesity.

Where a pair of doors are preferred, these should be hinged to a central jamb, opening towards each other, to prevent congestion. But, generally speaking, it is better to have single doors at a distance from one another, rather than doors fixed in pairs.

## Arrangement of Interior.

It is not long since the interior of every shop, almost without exception, consisted of a monotonous array of goods hopelessly overcrowded in cumbrous fittings, with the floor space occupied largely with bulky counters. The comfort of customers was hardly taken into consideration, with the result that sale times were invariably periods of annoyance to purchasers through jostling and overcrowding, and of perpetual worry to the harassed assistants who, besides having to attend to several persons at one and the same time, had to keep their eyes continually on the alert for pickpockets and pilferers.

To-day there is a radical change, and the generally accepted view is that the perfect emporium should be designed with plenty of open space where business can be conducted without inconvenience to all parties, and where the shopper is given elbow room to move about and examine the different lines on exhibition, with a view to creating additional and chance sales.

In planning the interior, the position of doorways, arches, windows, and other structural features must be carefully studied, in conjunction with the requirements of the various departments. Here the business man would do well to consult the shop-fitter, whose cumulative experience in planning and building stores for different classes of trades, and the varying floor plans of premises, place him in a position to advise in overcoming obstacles.

## Draw up a Rough Plan First.

The first step to take is to draw up a rough plan of the desired arrangement of departments, and their general requirements, allowing a margin for possible later extension and the creation of "side" departments.

A View of the Magnificent Corner Entrance at Messrs. William Whiteley, Ltd., Westbourne Grove

The retailer himself knows his own requirements best, therefore it is for him to make this choice.

A milliner, for example, naturally pays most attention to the hats themselves, therefore the hat department has the choice of position. Subsidiary lines, such as flowers and feathers, hatpins, or veilings, while receiving due prominence, have to take second place.

A grocer making a speciality of tea or margarine in a district where not much trade is possible in condensed milk, would arrange his counters so that the stream of purchasers of his tea or margarine would be served at once and not have to wander through a series of departments to make their purchase.

And so on with every trade, the main object being to arrange the departments in a position best suited to their requirements, always bearing in mind the advantages of arranging for the probable sequence of trade, and endeavouring, as far as possible, to preserve a symmetrical and unbroken appearance of the whole floor.

## Expert Advice.

Much valuable space is often wasted by the amateur in designing the whole premises himself. In a store of any magnitude, provision has to be made for staircases, lifts, heating apparatus, cash desks, etc., and here the expert's advice will save money in the long run. For it must be realized that as long as floor space has to be paid for, either in freehold or rent, every inch of room not being utilized to its best advantage represents an actual money wastage, and is, as such, an annual dead loss to the proprietor.

A Striking Example of a Modern Store Front. In This Instance, the Effect was Created by Employing Aluminium in the Decorative Treatment Above Transome Rail

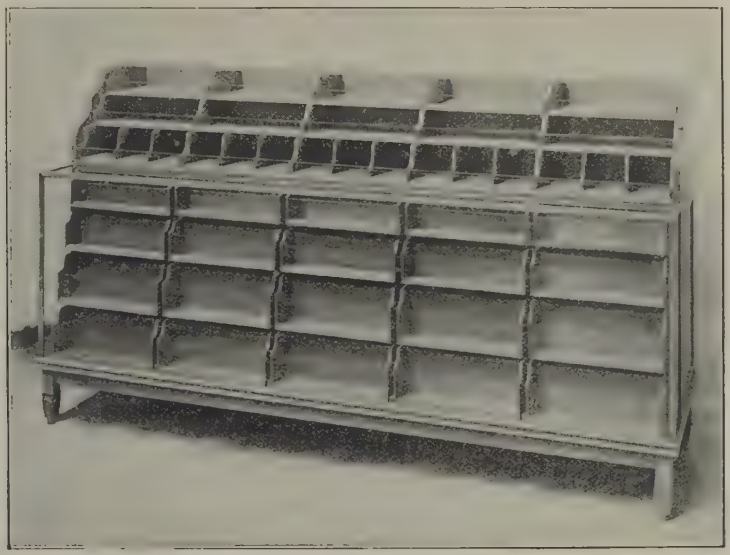
## The Equipment.

Having arranged the position of the departments, the next thing to consider is the equipment required and its composition.

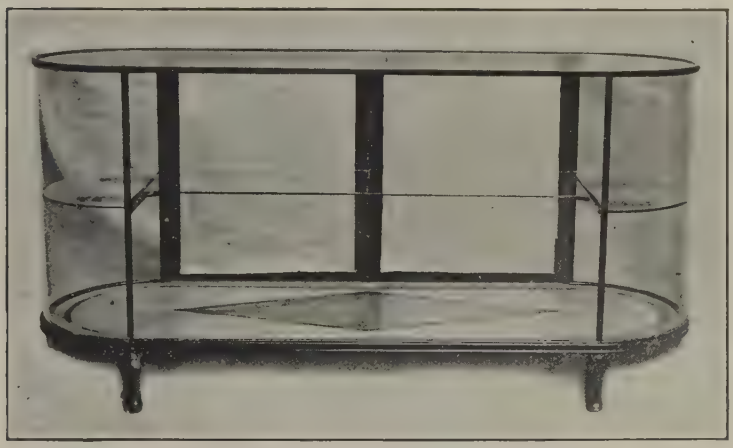
The modern draper is more than his brother of the past. He is often a draper, haberdasher, milliner, costumier, hosier, and a dozen other traders rolled into one. He has therefore to provide fittings for holding an immense variety

of merchandise within a limited space, and the problem resolves itself into a question of doing this in a way that will not unduly confuse his staff or inconvenience his customers. At the same time, he has to allow for continual departmental alterations, owing to the changing fashions in women's tastes.

Perhaps the most satisfactory fittings for him are those constructed on the unit principle, of which there are many excellent makes on the market. The idea of these fittings is not only to protect the stock from dust in compartments suitable to its needs, but to make it visible to the shopper's eye, while permitting the assistant to withdraw the compartment containing the goods required for inspection in a fraction of time, and with a minimum of effort and handling.



A Modern Haberdashery Counter, Combining the Qualities of Maximum Display with Quick Service. The Recessed Trays are Withdrawn from the Back



A Typical Example of an All-Glass Counter, Opened at the Back by Means of Sliding Sashes

More stock can be carried in fittings of this

nature in a limited floor space than was possible with the massive fixtures of the past, whereas the fact that in most cases the units themselves are interchangeable offers unlimited scope for departmental alterations or expansion without dislocation of business.

For shops devoted to the sale of foodstuffs, there is no doubt that mahogany or oak and marble, used in conjunction, present the most handsome effect and create the clear, refreshing atmosphere so essential where these commodities are retailed. Counters should, for preference, be mahogany—a hard wearing wood that long retains its appearance—with tops and risers of either pure white or veined marble. The fittings in such a store should have a brass and nickel finish—the latter for preference, as, with brass, the lacquer has a tendency to deteriorate rapidly.

With regard to shops such as jewellers, where it is desirable to employ every possible medium for display purposes, all-glass counters are to be preferred to the old-fashioned wooden type with a show-case on top. The framework of modern glass counters is usually of oak or mahogany, though the use of metal in this connection is beginning to find considerable favour; the design is invariably pleasing to the eye, as will be seen from our illustration; while the plate glass employed is strong enough to withstand considerable wear and tear.

A recent innovation is the insertion of a ridge-bar across the counter top, where trays or bulky packages are continually being put on top of the counter, this bar acting as a safeguard to prevent the glass from being scratched by contact, thus considerably prolonging the life of the counter.

Wall fittings should be sufficiently commodious to hold all necessary stock, and boxes should never be allowed to accumulate on top of them, as these cannot help to smarten the appearance of any store, but merely collect dust and detract from the light distribution if near windows or skylights.

## Distribution of Light.

The proper distribution of light within the store is a point that must be given particular attention. It is important that this be done before the fixtures are installed. In the first place, natural light costs nothing; in the second place, shades of colour are difficult to examine in an artificial light.

Therefore, fabric departments should be placed where they will receive the full benefit of any natural light admitted to the store, with due regard to facilities for shading the merchandise from the full force of the sun's rays.

## Window Enclosures.

Every trader should look upon his shop-front as a picture frame, and the window enclosure as the canvas of the picture. Before the individual objects in his displays can be seen to perfection, the background must be satisfactory.

An excellent plan is to have the window backed with wood panelling unless constant change of background is required. In the latter case it must be borne in mind that the decoration must be in relation to the proportion of the window.

An Elegant Showcase Designed in a Kidney Shape. Such a Fitting Enhances the Appearance of Any Store

A wide, low window requires short, horizontal lines in the background, broken by perpendicular lines to give the best effect, whereas a high narrow window requires the opposite.

One of the most difficult problems with which to contend is that of reflections in a window. Many an effective display has been utterly spoilt from this cause. Bent glass windows are bad offenders in this respect.

Reflections can, however, be remedied to a

certain extent if a few simple rules are followed. In the first place, mirror backgrounds should be avoided absolutely. They create a muddled effect, thus spoiling the value of the best display by detracting the spectator's attention from the merchandise.

Dark wooden backgrounds are another source of trouble. In effect, these convert the windows into mirrors, thus obscuring details of the goods behind the plate glass. The remedy is to employ a light background. Not only will the possibility of reflections from opposite buildings or of passing traffic be minimized, but the tendency is for the window enclosure to appear larger.

## Lighting.

Many old-fashioned firms still pay no heed to the lighting of their windows, with the result that the value of the window display is reduced to a minimum in the gloom of the evening, and fails to attract the attention of the shopper. The progressive retailer should never lose sight of the fact that a well-illuminated window possesses great advertising value, besides enhancing the general appearance of the goods displayed.

*By permission* *Army & Navy Stores*

A Fine Interior

A fault that is commonly made is the installation of unscreened lamps of high brilliancy. The result is a glare of such intensity that it dazzles the eyes and makes it impossible for anyone to inspect the contents of the window without considerable discomfort.

Where these are already installed and it would be inconvenient to make a substitution, matters can be remedied to a certain extent by screening the front of the lamps and fixing reflectors at the top of the windows to focus the light and concentrate it where it is most needed. The same thing applies to lamps which fail to give sufficient illumination.

A method which has met with considerable success is to conceal the lamps in troughs with reflectors projecting the light where it is needed, and away from the window. Lamps should never be visible from the outside, if the best results are desired.

Reflectors can be placed at the top, at the bottom, or at the sides of the window. The overhead method can be used in conjunction with a trough reflector at the bottom, and by distributing the lamp bulbs no extra expense is incurred, while the illumination will be greatly increased.

This method is to be preferred to the use of a top reflector alone, as the light is distributed on every part of the display, whereas, in the other case, the tendency is to illuminate only the upper part of the windows, while casting a heavy shadow on the lower portion.

The side positions are to be preferred in some circumstances and have their advantages, chief of which is the fact that the light is cast away from the onlooker and directly on to the goods. The main drawback is that the front portion of the display usually gets more than its fair share of light, to the detriment of any merchandise in the background.

There are various kinds of satisfactory reflectors on the market, constructed of enamelled or mirror-lined steel, or prismatic glass, and the judicious use of either kind will effect a considerable saving in the bill for lighting power.

## Display.

A great many retailers still fail to appreciate the fact that a large portion of their rent is paid for the privilege of having large frontages facing a main thoroughfare. They do not realize that their window space can easily be made to repay their cost, and what is more, bring additional business to the store.

There is hardly a firm in this country that has not a lot to learn from the Americans with regard to effective window displays and their potent sales value.

As in everything else, originality pays in window display. One of the principal points to be continually borne in mind is that, to be really effective, one article or group of articles in the display must be the main feature, the centre of attraction, to which all the others are purely subsidiary.

This method is commonly known as open display, and is carried out step by step. Commencing with the centre of the window, the point of attraction is fixed as the spot at the average level of the eye from the street. Here is placed the article intended to arrest the attention of the passer-by. On each side are grouped the other articles to be shown arranged on suitable fittings, carefully avoiding overcrowding.

Open display is almost invariably to be preferred to the old-fashioned method of massed display, but it must never be forgotten that what white space is to a newspaper advertisement, an open, roomy effect is to the window display.

In employing colours for effect considerable forethought must be exercised. A brilliant clashing effect may dazzle, but it will not attract, and far more successful results will be obtained from a scheme in which the colours blend and harmonize and offer no offence to the senses.

As a man is too often judged by his personal appearance, so is the merchandise sold in a shop often judged by its appearance in the window, and the retailer ought, therefore, to do everything in his power to show his wares to the best advantage when submitted for public criticism in his windows, remembering always that a novel or striking window display invariably results in an exchange of talk and opinion amongst shoppers, and so gives his goods a great amount of free publicity.

## CHAPTER II

## PLANNING AND EQUIPMENT OF THE MODERN OFFICE

By R. L. Gooch, A.C.I.S.

The influence of surroundings has a marked psychological effect upon the susceptibility of the individual. The State has already recognized this fact by the introduction of the Factory Act, which has done much to mitigate the conditions of manual labour by stipulating a standard of sufficient ventilation reduced to a definite number of cubic feet of fresh air per hour for such persons employed; and there appears to be a great need for a similar recognized standard of hygiene for the clerical worker.

Many employers have complained that the work of the office staff is mechanical, and this can be attributed to unhealthy surroundings and physical discomforts which reduce the worker to a state of mental torpor, producing lack of concentration and mind wandering with far different matters. This unsatisfactory state of affairs can be remedied to a great extent by careful planning, embodying ventilating, heating, lighting, and decorating of the offices,

### Division of Office Work.

It is necessary in the first instance to decide upon the divisions and lay-out of the office work. The logical division of office routine depends invariably upon the nature of the business, and can be decided only by the knowledge of the conditions.

No matter what size of office, the divisions should be arranged so that the work will pass from one division to another with the least expenditure of time and effort, and the most efficient result is that of dividing the work into groups and making each group a unit, regardless of the work performed. The work logically turns from one department to another, and, in consequence, the departments follow each other consecutively; therefore, walls and partitions must be erected to the requirements and equipment of each department; in short, partitions should be suited to the staff, and not the staff to the partitions.

### General Sanitation.

The importance of subconscious influence cannot be gauged, and legal enactments are specially necessary in connection with that portion of the environment of which, normally, the workers are not conscious. For example, the drainage system is obviously a very important matter, but is of such a highly technical character that competent consideration of it is necessarily limited to experts. Although the control of this matter is in the hands of the local health authorities, a constant supervision from the office itself is necessary.

### Lavatories.

The construction and decorations of lavatories and cloak-rooms demand special care in arrangement to conform with the best principles of hygiene.

Floors should be mosaic, the walls to have white tiles to the height of 5 ft. from the floor, and the remaining portion above should be painted white. Ceilings should be distempered the same colour. In the directors' lavatories, a small table, one or two chairs, an umbrella stand, a 3 ft. wardrobe, and a mirror over lavatory basin should be provided. Other lavatories should have peg rails fitted to walls for hats and coats, and one or two chairs and a mirror should be provided in each. In lavatories for females there should be a small gas stove and wash-up sink provided.

To suggest a special responsibility, a distinctive uniform (i.e. overall) should be supplied to the cleaners, who frequently take a distinct pride in the appearance of the offices. To assist them in their work, vacuum cleaners for the carpets and upholstered chairs, and polishing mops for the floor coverings, should be supplied. The use of these accessories ensures the maximum cleanliness in the minimum of time.

## Partitions.

Generally speaking, partitions should not be higher than 7 ft. 9 in., so as to ensure free circulation of air over the whole floor. Private rooms and typing department partitions should be carried to the ceiling—in the first instance, to ensure privacy ; and in the second, to shut out the noise. Sometimes lower partitions 3 ft. 6 in. in height are very useful to define certain areas which do not justify higher partitions.

The most economical solid partitions for private rooms are breeze slabs plastered on both sides. For the general arrangement, framed and glazed partitions are most popular : the framing to be panelled to the height of 5 ft., and the remaining top portion to be lead glazed. Smaller barriers will be wood framed, panelled, and finished at the top with capping moulding.

## Heating.

Central heating by hot-water radiation is undoubtedly the best method, with suitable radiators placed in convenient positions, preferably under windows, maintaining an equitable temperature of 55° F. Reference should be made to the section on " Industrial Heating and Ventilation."

## Lighting.

Careful consideration must be given to the artificial lighting of offices, which should be so distributed and steady as to avoid obscurity and deep shadows anywhere in the ordinary range of the workers' eyes. Most lighting units now in use provide a concentrated source of illumination, and to obviate shadows it is necessary that this source should be enclosed in a diffusing envelope, or placed outside the range of vision, which greatly reduces the brilliancy of the rays before they reach the eye ; otherwise, the workers are physically harmed and rendered inefficient for their work. Taking these facts into consideration, the most satisfactory lighting system for offices is the semi-indirect principle with translucent bowls, and for the passages and lavatories direct pendant with opalescent shades. (For further particulars, reference should be made to the special section on " Lighting.")

## Decorations.

In deciding the colour scheme of decorations, the principle objective should be to select a shade not merely for its artistic qualities, but for the purpose of providing the maximum of restfulness and light-giving properties, combined with the minimum degree of distraction.

Ceiling and friezes should be of white ; wall filling washable distempers of putty colour ; sashes, doors, skirtings, picture rails, and all deal work should be finished brush-grained dark oak, with an egg-shell gloss varnish. Oak partitions should be finished a dark fumed colour, and wax polished. Special attention should be given to the entrance, board room, private rooms, etc. Details of these schemes are described under their various headings.

## Floor Coverings.

Linoleum of a dark serviceable colour is the most suitable floor covering for the general offices and passages, whilst the state rooms, i.e. board rooms and private rooms, should be furnished with a pile carpet, which adds considerable tone to the surroundings. A large cocoa mat contained in a sunk well-hole with brass nosing, should be provided at the entrance.

## Entrance and Waiting Room.

The general status of a firm is frequently assessed by first impressions, and, consequently, the entrance and waiting rooms should be designed to impart a sense of well-being and cordial welcome.

Oak panelling to a height of approximately 8 ft. is a very effective treatment of the walls, whilst the plastered walls above should be treated with putty-colour distemper.

The equipment should consist of a suitable oak table, two or three large chairs, several small chairs, carpets, and lighting pendants in keeping with the general surroundings.

There should be an enquiry office, with an opening (size 4 ft. by 4 ft.) in the wall of the entrance hall, and an antique brass grille should be provided, where callers should state the nature of their business.

## Enquiries and Post.

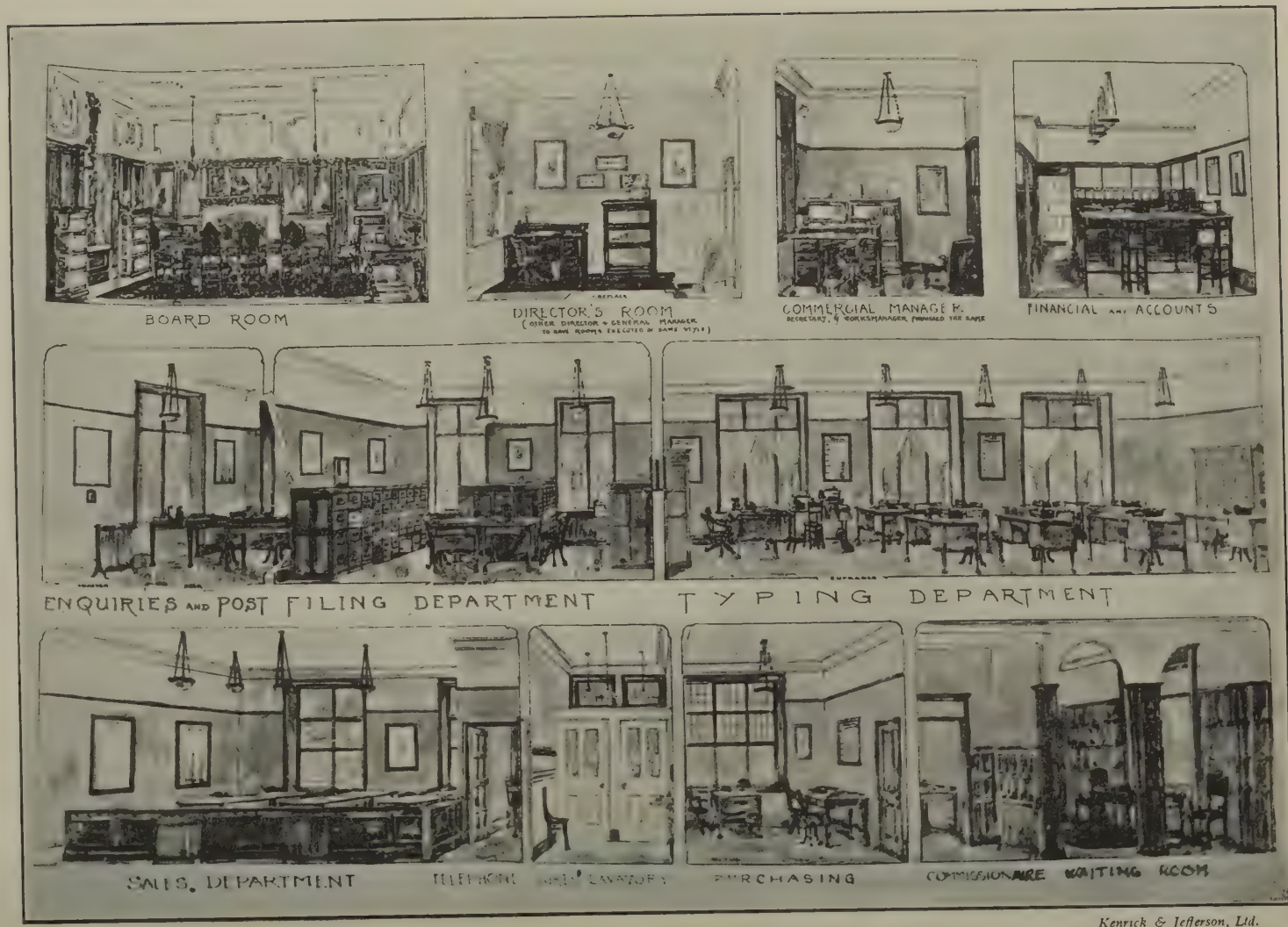
This department serves a dual purpose of enquiries and post, and is responsible for attending to callers, giving them general information, and controlling the internal messenger service.

The incoming mail is collected and delivered to this department, where it is opened, registered, sorted into departmental baskets, and distributed to the departments concerned ; whilst the outgoing mail is collected, linked up with enclosures, stamped, registered, and despatched. Two or three clerks' desks and chairs, a postal sorter, a large table for sorting and despatching the mail, is the necessary equipment to deal efficiently with a post of any magnitude.

## Central Filing Department.

Considerable attention must be given to this department, as the smooth running of every business is almost entirely dependent upon its efficient functioning. The situation of this office should be between the enquiry and post and the typing departments, hatches in the partitions being the connecting links.

It is essential that this office be equipped with four-drawer vertical filing units, complete with




*By permission*

*Kenrick & Jefferson, Ltd.*

SUGGESTED LAY-OUT OF OFFICES

folders and necessary guides for the systematic housing of all records, sufficient card index tables for storing index cards recording the names of all customers and correspondents, a fairly large table for sorting, and the necessary chairs. (A suitable size for index cards is 6 in. by 4 in.)

Briefly, the functions of this department are the referencing of all correspondence, orders, documents, and the general control of the master index, recording replies, filing papers, issuing, controlling, and disposition of folders; and following up matters for subsequent consideration.

## Central Typing Department.

Individual unit typist desks, containing suitable accommodation for storage of stationery, cleaning outfits, etc., and revolving typists' chairs, should be allocated to all the typists.

The full complement of typists is assembled in this room, and although certain officials and heads of departments would have the first call upon a particular stenographer, the general typists would be subject to calls from any department when their services were required. As all these calls are controlled by the supervisor, this method of distributing the typing work of the whole establishment reduces to a minimum any waste of time and idleness, which is generally the accompaniment of the individual typist system.

## Telephone Room.

It is necessary, to insure the saving of time, to equip all offices with both the Post Office and internal telephonic systems. For the Post Office system, a telephone room with switchboard must be provided, which should be under the control of a very efficient, intelligent, and clear-headed operator, whose duty will be to record and register all calls, attend to the general switchboard work, and, in the absence of any official, to accept and convey intelligently any messages transmitted.

Even with these two systems installed, it is still necessary to install a form of buzzer, with an indicator in the enquiry room, as frequently the occasion arises that the various officials and heads of departments require instantly a messenger to run some simple errand. Messengers are very useful for taking work from one clerk to another, as they save the time of the clerks and obviate the disturbing feature of clerks running from one office to another.

To complete the equipment of this office, a table about 4 ft. by 2 ft., and a comfortable revolving chair, are all that is necessary.

## Sales Order Department.

Estimating, sales order, stock control, advertising, controlling output, cost of production, predetermination of prices, pricing orders, and the "following up" of orders in abeyance and order enquiries all come in the work of this department.

Suitable accommodation and equipment must be provided to deal satisfactorily with its routine. The chief equipment is the card system, housed in filing drawers, accommodated upon 4 ft. by 2 ft. tables, which serve also as clerks' desks. Alternatively, card index tables, or system desks which contain efficient filing accommodation, may be used.

## Financial Department.

Attached to all well-organized financial and account departments should be a strong room, built, if possible, in the immediate vicinity. The room should be constructed solely of cement, with both floor and walls reinforced with iron girders. The room should be fitted with steel shelving.

Considerable saving is effected by the transportation of ledgers (whether renewal leaf or card ledgers, which would be suitably housed in cabinets) on a truck which can be stored in the strong room itself.

Desks with filing accommodation for housing card ledgers, accounting and mechanical posting machines, and suitable chairs for clerks complete the equipment to perform efficiently the duties of this department, which consist of invoicing, credits, ledger postings, rendering and collecting accounts, etc.

## Cashier.

Usually, the cashier has a small private office adjoining the financial department. Although one of the private offices mentioned at the commencement of this chapter, its importance hardly justifies special decorations, and therefore the decorating scheme should be the same as in the general offices. In equipping this office, however, it is necessary to provide a flat top desk rather superior to that which is in general use, and also an interview chair, a comfortable revolving arm-chair for personal use, a safe, cash box, and bookcase.

## Purchasing Department.

Visiting travellers find it very convenient when this department is situated near a side entrance; and, in such a case, a great saving of time, both to the firm and to the interviewer, is effected. This office should be equipped similarly to that of the cashier's, with the addition of filing cabinets for records solely applicable to the buyer.

## State Offices.

Under this heading are the offices of the secretary, commercial manager, general manager, and directors, and also the board room.

The offices of the secretary and commercial manager are in agreement with the general scheme of decorations, but the general manager's office, the directors' room, and the board room call for special treatment.

The following are the requirements for an

effective decorative scheme for the general manager's and directors' offices—

Skirting, dado rail, and cornice, to be fixed all round the room; mouldings to be framed in the walls, thus forming a series of panels; the entire walls, ceilings, and mouldings, to be finished flat white; sashes, linings, and doors to be in mahogany; a Persian or other carpet square, of such an area as will allow for turning, so that the wear is equally distributed, should be supplied. Each room should have a 5 ft. by 3 ft. lined flat-top mahogany desk with filing accommodation, mahogany revolving arm writing chairs with upholstered seats, a mahogany interviewing chair with upholstered seat, mahogany bookcase, and a large easy chair upholstered in hide. The heating of these rooms should be by hot water radiation, and the lighting by the semi-indirect system as previously described.

The offices of the secretary and commercial manager are also supplied with carpet squares, revolving arm-chairs, flat-top lined desks, with filing accommodation, interview chairs, book-cases, and additional tables; this furniture being different from that of the general manager's and directors' rooms, being of oak instead of mahogany.

## Board Room.

The board room is to the office as the drawing room is to the home, and, consequently, is subject to distinctive treatment with regard to both decorations and equipment.

The walls should be covered with wide Georgian panelling; two cased beams to be introduced, and these supported by oak fluted columns with carved capitals, and pillasters of a similar nature fixed on walls. Ceilings between beams should be enriched finished white; windows constructed in oak and fitted with leaded-light casements. A Turkey carpet should be provided, and the equipment should consist of a board table with lined leather top (size 8 ft. by 4 ft.), two chairman's arm chairs, and six small chairs to match, all to be in oak.

## Time-Saving Appliances.

Most of the essential departments have been effectively equipped, but there still remains for consideration the many time-saving appliances which can successfully be introduced. For example, mechanical accounting machines, calculators, duplicators, cheque protectors, addressing machines, and the latest postal meter machines —these are a few of the time-saving appliances in use in modern offices.

If only for the purpose of saving in the expense of office printing, some method of duplicating should be introduced. Some very comprehensive schemes can be carried through with its help; and a good duplicator will save its price many times over in almost any office, even in the preparation of form letters.

Look at the functions that a mechanical accounting machine performs. In posting the Ledger, it picks up the outstanding balance, posts the debit, and automatically records the new increased balance; or deducts the credit postings, showing the reduced new balance, and thus revealing the exact position of a customer's account without any mental calculation. By the introduction of a split carriage, the statement can be made out at the same time, and automatic agreement assured.

The saving in postage which can be effected by a postal meter machine is undoubtedly very considerable in the case of a large firm, but probably many firms may not like the machine because of the nature of the "franking" impressed, which is inclined to give the letters the appearance of circulars. In most cases nowadays the "franked" envelope is not given the same attention as an ordinarily stamped one.

## Conclusion.

Whatever the size of office, provided that a careful study of the original floor space is made, the system of planning dealt with in this chapter can be adopted. The arrangement of departments is, perhaps, one of the most prolific sources of waste motion. Many offices seem to have been built upon the same plan as that of the pioneer's house—a room at a time, as needed.

The time to begin to save useless steps is when a start is made in arranging the departments of the office.

In planning the office, the relation of one department to another must be closely studied, so that the work will flow in a continuous direction wherever possible.

Desks should be placed on the unit principle, so that a clerk can leave his desk without disturbing anyone. The passages and aisles should be straight, running through from one end of the office to the other.

Should the general comfort of the worker be considered, much can be done in this direction to increase efficiency; for example, when a worker was using an adding machine as much as 15 per cent increased efficiency resulted by a careful motion study of the worker, and the subsequent use of an adjustable chair, elevated and tipped to the required angle.

Fountain pens should be supplied to every worker, and particularly to an executive officer, since he is often called upon to write in all parts of an office where an inkwell may not be handy. In fact, inkwells should be eliminated entirely from the equipment of a modern office.

Scientific Planning, Decorating, Lighting, Heating, and Equipment are of the greatest possible benefit both to employer and to employee, and

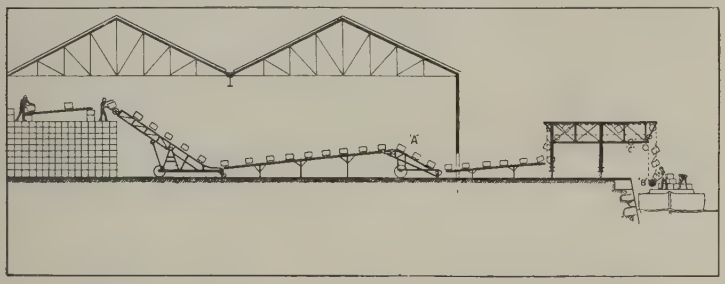
if a final effort is made by both to make the office as quiet as possible, fatigue will be considerably lessened, and in every minute 60 seconds' worth of willing and efficient work will be obtained.

## CHAPTER III

# THE PLANNING AND EQUIPMENT OF FACTORIES

By Harley Carter

Good organization and equipment are such important factors in industrial efficiency that, whenever the question of founding a new factory, or of moving an existing works to new premises, or even the extension of old premises arises, the time spent in considering the best way of planning and carrying out the equipment will be amply repaid in saving of both time and money. This saving will be evident, not only as a permanent lowering of the cost of production, but also as a direct economy in initial outlay.



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Donald Patent Elevator-Conveyor Unloading Barges on to Gravity Conveyor

The gradient is renewed by means of a Humper at "A," and so on to a Stacker to the dump.

Here it may be remarked that it is highly desirable that a definite programme be mapped out at an early stage so that the whole work of equipping the factory can be carried out without confusion and muddle. Under such conditions, if the various contractors and sub-contractors can be persuaded to work to schedule, the factory can be got into running order and production commenced at the very earliest possible moment, no money or time being frittered away on wasteful experiments and re-arrangement of the plant.

## Choice of Site.

Where a new factory is to be built, it is first of all necessary to fix on a suitable site. Before commencing the search for this, some idea of the total floor area required should be formed. This should be estimated upon a generous basis rather than cut down to an irreducible minimum, as a crowded factory always means muddle and loss of efficiency. A suitable percentage for possible extensions should be added to the area actually required, and it is then necessary to seek a site which is large enough to accommodate the proposed works and extensions, and is in every other way desirable. The suitability of a site may be judged by the extent to which it complies with such of the following requirements as the nature of the factory demands—

1. Is it provided with a railway siding, canal dock, or other transport facilities ?
2. Has it a good road approach ?
3. Is the water supply good and sufficient ?
4. Are gas and electricity available ?
5. Is sufficient skilled and unskilled labour obtainable locally ?
6. Are there any local restrictions or regulations which would affect the trade to be carried on at the factory ?

## Building.

The modern tendency in the design of factory premises is distinctly toward the provision of one-storied buildings, unless there are very definite advantages to be gained by adopting a multi-story construction, as, for example, where the raw material or products can be passed from one department to another by gravity chutes. Tall buildings are also necessary if the site is small or the ground very valuable.

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Overhead Conveyor Handling Large Cases from One Building to Another

Whatever type of building may ultimately be

decided upon, it will be the architect's responsibility to see that the fabric is suited for the purpose in view. Good provision for natural lighting is essential, and it is here that the one-story building with north-light roof is pre-eminent.

The office should form a block apart from the works themselves, and this may be a two-storied structure. The ground floor may be devoted to public and business offices, the drawing office and designer's rooms being above to obtain the best daylight conditions.

## Lay-out.

In the lay-out of the factory—the positions of the various departments relative to each other and the arrangement of the machinery and plant therein—lies one of the greatest opportunities for those who have the gift of organization. In a well laid out works, material passes on from process to process and from department to department in a steady stream in one direction only, never doubling in its tracks to cause confusion and congestion. Such a factory is always tidy, and a minimum of time and labour is expended in transporting material from one place to another—an item of expenditure which does not increase the value of the goods by a single farthing.

The best lay-out for any given works is only to be arrived at by careful consideration of its individual needs. It will be affected by such factors as the shape and size of the building, the type of goods manufactured, and whether the products are finished outright ready for despatch or made up into component parts which are only assembled into complete units as orders are received.

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DONALD PATENT ELEVATOR-CONVEYOR TO UNLOAD BARGES

This Conveyor can be swung round and the Conveyor itself taken along the Jib so that four barges can be worked without moving.

Much, too, will depend upon the internal organization adopted, especially in the case of small factories where each manager may have charge of more than one department, and will naturally wish that all the sections under his control shall be grouped as near together as possible.

It is impossible, therefore, to lay down hard and fast rules for the lay-out of the factory. Some of the guiding principles, however, may be conveniently illustrated by following in imagination the journeyings of the raw material through the works until it emerges as the finished product.

The raw material, whether arriving by

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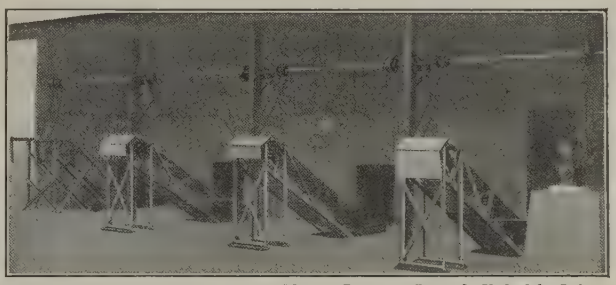
PORTABLE STACKER HANDLING BAGS

road, rail, or water, enters the works at the receiving store. This apartment should be large enough to allow the maximum quantity of goods likely to be received at one time to be accommodated until it can be distributed. Suitable provision in the form of a crane or runway should be made for unloading lorries or other vehicles. Benches for unpacking and sorting small packages should be fitted around the sides of the store, together with desks at which advice notes can be scrutinized and the necessary receipt notes made out.

From the receiving store, the material generally passes to the raw material store, which should adjoin the receiving store. It should be of sufficient area to accommodate all the material likely to be held in stock during normal times. If the supply is likely to be irregular, provision should also be made for holding emergency reserves, and this point should be taken into account when allocating floor area. Useful appliances in this connection are portable stackers or pilers, which enable every inch of floor space to be used. Goods may be stacked right up to the ceiling, if the floor allows. In addition to bins or other receptacles for the material, a portion of the store should be partitioned off as an office for the stock-keeper. There will then be no excuse for stock records or other clerical work being in arrear owing to lack of office accommodation.

When the product is manufactured outright, the raw material will be drawn from store and will not return until it does so in a finished condition ready for despatch. It is sufficient to remark, therefore, that the lay-out of the factory should be such that the section in which each process is carried out should be situated immediately adjacent to that in which the previous process is performed, the last process bringing it close to the stock-room or despatch store.



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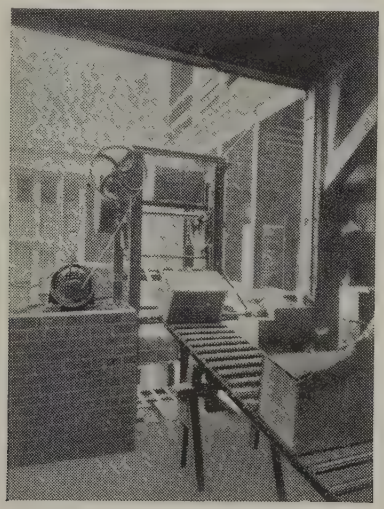
INSTALLATION OF INCLINED ELEVATORS FOR LOADING PETROL TINS INTO VANS



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DRIVING END OF SWING-TRAY ELEVATOR; ALSO SHOWING DISCHARGE ON TO GRAVITY CONVEYOR

*Messrs. Rownson, Drew & Clydesdale, Ltd.*

SPIRAL CHUTE USED TO LOWER BALES OF PAPER

For the rest, while due economy in floor space is essential, the plant should be arranged with ample alley-ways between, for the passage of trucks and for stacking incoming and outgoing work.

Where the processes of manufacture are more complicated, as, for example, where component parts are manufactured to be made up as required, a " finished part store " is necessary. This should be situated in some central position so that parts can be delivered to and issued from store with a minimum of transport.

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OVERHEAD RUNWAY HANDLING LONDON MEAT SUPPLY AT THE ROYAL ALBERT DOCKS

Thus, in one small engineering works, the component part store occupies the central portion of the middle bay of three, the receiving department and raw material stores being at one end of the bay, and the despatch department at the other. The two side bays are allocated respectively to the machine shop on one side and the fitting and erecting shops on the other.

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GRAVITY CONVEYOR SHOWING THE USE OF CURVES

Whatever the arrangement adopted, the same principle must always be kept in view, namely, the uninterrupted flow of work through the factory with the minimum of handling.

## Equipment.

No attempt will be made here to deal exhaustively with the hundred-and-one items which go to make up the equipment of the modern factory. Indeed, the demands of the different trades are so varied that it would require a whole volume merely to catalogue them, apart from enumerating the advantages and disadvantages of the various types. Little will be said, therefore, regarding the actual machinery used in the manufacturing processes, except to urge that it, as indeed all the plant in the factory, should be of the best quality that can be afforded.

This is synonymous with the best that is obtainable, for no manufacturer can afford to risk the losses occasioned by stoppage of work due to faulty machinery—loss of output, loss of wages paid to workpeople and staff while standing by, and loss of reputation owing to bad delivery.

It is intended to confine the remarks on equipment mainly to the three sections common to all factories, viz.—

1. Conveying and transporting machinery.
2. Driving plant.
3. Lighting equipment.

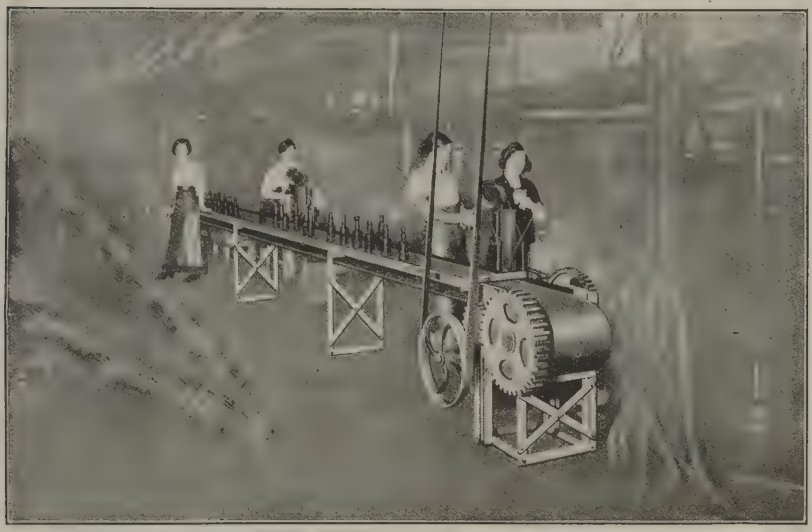
## Transporting Machinery.

Mechanical handling of material should be adopted wherever possible for the sake of both economy and speed, and, if foodstuffs are being dealt with, for hygienic reasons. Where the route followed by the material is always the same, permanent plant, in the nature of overhead cranes

or runways, belt, or other conveyors or lifts, should be installed. In factories where the routes taken must vary, some type of truck must be provided.

For handling heavy pieces, such as large castings and machinery, the usual type of overhead traveller spanning the shop is the most satisfactory. Small jib-cranes at intervals down the shop are useful in setting up work on the machines, and prevent the overhead crane from being monopolized on one job. For lighter work, girder runways are extremely useful, and as these can be fitted with a large number of crabs and arranged with a system of points and sidings, they can often be adopted as a standard equipment throughout the factory. They may be either electrically driven or operated by hand-power. Of the many forms of conveyor, the most popular for use where material is handled in bulk is the belt type. These machines are simple in operation and easy to install. The power required for running is smaller than for any other type, they are practically noiseless and perfectly reliable. Another advantage of the belt conveyor is that it can be loaded and made to discharge at practically any point in its length. Gravity conveyors, such as those illustrated, use no power at all except gravity. They are particularly economical for use for handling packages offering one hard smooth surface.

Various forms of truck or trolley are now on the market. For hand-power, a type with an automatic lifting device is preferable where heavy objects are to be transported. Electrically-operated trucks have the advantage of speed, and, if carefully charged when necessary, have a very long life.



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BAND CONVEYOR IN A BOTTLE-WASHING PLANT

## Driving Plant.

The use of the electric motor for driving industrial machinery is now practically universal, and it is certain that no new factory is likely to be equipped for other than electric drive, except under very exceptional circumstances. However, it will be as well to summarize the chief advantages of the electric motor before discussing the merits of the various arrangements of drive.

In the first place, no other method of transmitting power is so economical. The losses in the electric cable are extremely small compared with the power absorbed by long lines of shafting.

The space occupied by electrical apparatus is very small, and the absence of the shafting and maze of belting associated with other forms of drive reduces the capital cost of installation and makes for a better lighted and more airy works.

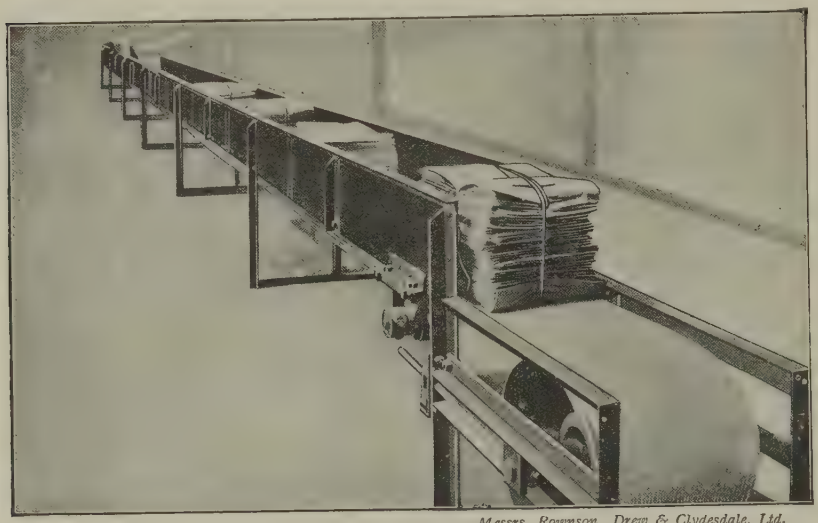
The ease with which electric motors can be controlled is one of the great advantages of the electric drive, and the simplicity of the apparatus results in considerable reduction in maintenance costs.

But, quite apart from these items, it is in the large saving in the running costs that the electric motor has its chief claim. If the various groups of machines driven by each motor are suitably chosen, motors can be switched off when not required, and this economy, with the very low transmission losses already mentioned, may mean a saving of anything up to 50 per cent of the power bill.

## Source of Supply.

One of the first questions to arise when the power scheme is under consideration, is whether the factory is to take its supply from the public mains or to have its own generating plant. Broadly speaking, the former will be chosen for small and

medium sized factories, as the local supply authorities can generate current at a far lower cost than is possible in a small isolated plant. The factory owner is also relieved of the heavy expenditure on generating plant, and can utilize the capital thus conserved in the specialized machinery required for the factory.



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BAND CONVEYOR HANDLING NEWSPAPERS

A notable exception to this rule must be made in the case of factories where steam or heat is required for factory processes. In such cases, it will often be economical to install steam-driven generators and to use the exhaust steam in the works.

## Direct Current *versus* Alternating Current.

The public electricity supply will be either direct current or alternating current, and, if the latter, either high tension or low tension.

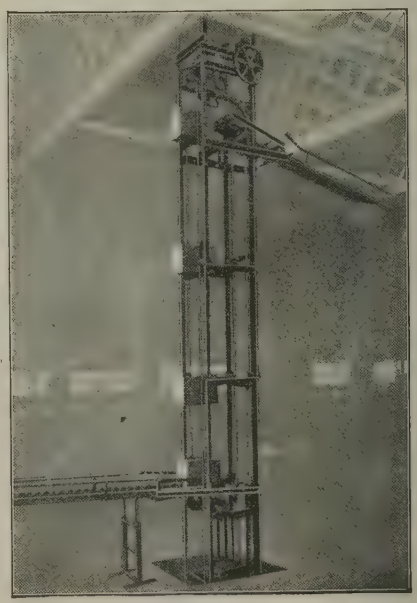
A high tension alternating current supply will, except perhaps in the case of very large motors, necessitate the provision of transformers to reduce it to medium or low pressure. If direct current is necessary, a rotary converter will also be required.

The chief advantages of direct current motors are their simplicity, and the fact that, where required, their speed can be varied over a fairly wide range.

The speed of alternating current motors, on the other hand, is not so readily capable of adjustment, but for general industrial purposes they are perfectly satisfactory, and there are to-day quite as many alternating current motors in service as direct current—if, indeed, there are not more.

## Individual *versus* Group Drive.

In the past, much controversy has arisen as to whether each machine should be driven by its own motor, or whether many machines should be driven from one motor by means of countershafting. No hard and fast rules can be laid down, but, broadly speaking, it is safe to say that any machine requiring more than about 20 h.p. should have its own separate motor. In small factories, and in small shops in larger works, it may be convenient and economical to drive the whole of the machinery from one motor, but in larger plants the question of installing a number of motors, each



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SWING-TRAY ELEVATOR USED IN CONJUNCTION WITH GRAVITY CONVEYOR

driving a group of machines, should receive careful consideration.

The advantages claimed for group driving are briefly set out below—

1. In case of the breakdown of one motor, only a small number of machines is put out of commission, and it is only a total failure of supply which will shut down the whole works.

2. The extra cabling to the various motors is far less costly than the line shafting and belting that would otherwise be necessary, and the transmission losses are smaller.

3. Should it be necessary to run a portion of the machinery overtime, this can be done without incurring waste of power in having all the line shafting in motion.

4. By carefully arranging the various groups it is possible to standardize the sizes of motors used. Thus, it often happens that only two or three sizes of motors are employed throughout, and only one spare of each size need be kept as a stand-by.

The grouping of the machines should be very carefully worked out, foresight being exercised to ensure that really useful combinations of machines can be run together in the event of only a portion of the plant being required to run. In some factories it can be arranged that one group or series of groups forms a complete manufacturing unit, thus allowing comparatively small orders to be handled which could not be undertaken economically if the whole plant had to be run.

## Factory Lighting.

The elevation of illuminating engineering to the position of an exact science during the past ten years has brought the subject of factory illumination into great prominence, and much importance is now attached to the scientific illumination of workshops. Without going into details of the various researches undertaken in this country and abroad, it is safe to assert that a very definite relationship exists between the quality of the lighting and the productiveness of the factory.

A properly designed lighting installation has a two-fold effect on the efficiency of the factory: firstly, by increasing production; and, secondly, by conserving the health and eyesight of the employees and reducing the number of accidents. The improved productiveness is achieved partly by quicker work and less waste of time owing to the difficulty of seeing in a poor illumination, and partly by a very marked decrease in the amount of spoiled work. Spoilages are a double loss to the manufacturer, for not only is the material rendered useless, but all the work already done on it is utterly wasted. Where inefficient methods of lighting have given place to up-to-date installations, spoilages have been reduced by anything up to 70 per cent.

Although no definite codes of regulations, as enforced in certain States in America, and in other countries, have been laid down for this country, the Home Office have issued reports on factory lighting giving certain recommendations, and there are generally accepted rules which illuminating engineers observe in planning lighting installations, whether the illuminant be electricity or gas.

There are two chief systems of lighting: (*a*) overhead; (*b*) local lighting. Overhead lighting consists in providing a general illumination over the whole area to be lighted, this illumination being as uniform as possible. Local lighting consists in illuminating each bench or machine by small individual lamps.

Overhead lighting is recommended wherever possible, local lighting being reserved for very small shops or for special positions where additional lights are required to supplement the general overhead illumination. The advantages of overhead lighting may be summarized as follows—

(*a*) The cost of installation and running is low, since a few large and efficient units can be employed.

(*b*) If at any time the arrangement of the machines is altered, it is not necessary to move the positions of the lights.

(*c*) The fittings are suspended at a fair height, well out of the range of vision, and, if equipped with correctly designed reflectors, there is no risk of "glare."

(*d*) The high suspension decreases the number of lamp breakages.

The following points should receive consideration in planning any lighting installation, but especially one where low-hung local lights are employed—

(*a*) The illumination should be more or less uniform without violent contrasts in intensity.

(*b*) The light should come from the correct direction and be well diffused to obviate inconvenient shadows.

(*c*) The intensity of illumination should be suitable to the class of work undertaken.

There are now available complete ranges of scientifically designed reflectors for use with both electric and gas lamps. Those for electric light will be more generally used, and are described hereunder. Reflectors for gas are designed on the same principles but differ in constructional detail, owing to the necessity of providing greater ventilation.

*Direct type* reflectors are those placed above the lamp to direct the light downwards. They are generally made of steel, with white, vitreous enamel reflecting surfaces. Some types are of prismatic glass, which may be backed with metal. They are made in various forms, known as "distributing," "concentrating," etc., according to the ratio which must be observed between the spacing of the lamps and the mounting height, if approximately uniform illumination is desired.

A well-designed reflector should have a good and easily cleaned reflecting surface upon which

dust and dirt do not readily accumulate, and the contour should be such that the bright light source is well screened from the eye. An example of such a reflector is shown below.

*Semi-indirect fittings* employ an opalescent bowl beneath the lamps, to diffuse part of the light and to reflect the remainder upward to a white ceiling or to a top reflector, whence it is re-directed downwards. They can only be employed in situations where but little dust is produced, and are most effective when hung about 9 ft. from the ground.

The regular cleaning of fittings cannot be insisted upon too strongly if the full benefit of scientific illumination is to be reaped. Neglect in this respect results in rapid falling off in the amount of light, amounting to as much as 40 per cent in a month in the case of only a moderately dusty shop.

The frequency of cleaning depends entirely on the dustiness of the atmosphere, but in no case should it be done less than once every four weeks.

## Industrial Welfare Work.

During the past few years, welfare work has assumed a position of great importance in factory organization. In its widest sense, industrial welfare covers a very wide range, including such items as fire brigades and fire drill, safety first precautions and good lighting, in addition to the more obvious social activities, such as canteen accommodation, first aid, recreation, and educational facilities.

There is not the slightest doubt that these amenities, if properly organized and administered, are appreciated by both staff and workpeople, and even apart from the moral obligation of employers to make working conditions as healthy and as cheerful as possible for their employees, welfare work reflects favourably on the productiveness of the factory. No modern industrial undertaking, large or small, therefore, can afford to neglect this branch of organization, which should be actively taken up, and suitable accommodation and equipment provided on a scale in keeping with the size of the factory.

## Fire-fighting Appliances.

In small factories, chemical fire extinguishers should be provided at suitable spots, and selected members of the staff instructed in their use. Larger works, however, demand more elaborate apparatus, and the chemical extinguishers should be augmented by fire hydrants.

A typical form of chemical extincteur is shown

here, and below a works hydrant with two coils of hose-pipe, one connected in readiness.

Where risk of fire is particularly great, as in stores and packing rooms where paper and straw and other highly inflammable material is kept, automatic sprinklers should be installed.

These sprinklers are connected in a series of

*The Pyrene Co. Ltd.*

water pipes run on the ceiling, and are adjusted to open automatically and flood the area beneath them as soon as the temperature reaches a certain

value. An electrical device can be provided, which, on the operation of a sprinkler, rings a bell or gives some other alarm signal. The fire equipment of every large works should include a number of plans of the factory, one of which should be displayed in every department. The position of the particular department should be marked in red on the plan, and red arrows should indicate the route by which the department is to be evacuated in case of fire.

## First-aid Equipment.

Boxes containing simple remedies, surgical instruments, and bandages should be available in each shop, but large factories need a well-equipped first-aid room, with a qualified attendant always on duty.

## The Social Side of Welfare Work.

The more social side of welfare work scarcely comes under the heading of "Planning and Equipment," except in so far as the provision of suitable accommodation and equipment of the canteen is concerned. Here, too, much depends upon the size of the works and the scale upon which welfare work is organized. For a small factory, a converted army hut or other small temporary building can be arranged as a canteen and rest room, ordinary cooking equipment being provided.

Larger establishments, however, are often the proud possessors of large and beautifully fitted club houses, with dining rooms for staff and workpeople, and kitchens equipped with the most modern electric cooking appliances.

SECTION 6

# Principles and Methods of Staff Selection

By A. H. Gilbertson, A.C.I.S.

CHAPTER I

## THE IMPORTANCE OF PERSONNEL

The most interesting statistics would be those which are never compiled; which are, perhaps, incapable of compilation. If, for instance, the real causes of failure in business were ascertainable in every case and were tabulated, the resultant figures and conclusions would provide food for profitable if somewhat melancholy reflection. Material for an even more interesting study would be available if there could be laid bare the reasons why some firms have an almost unbroken career of prosperity while others in the same trade are never anything else but "marginal firms," as the economist would call them, i.e. they just manage to pay their way and sell their wares at a competitive price. The information thus revealed would probably show that one important and frequently recurring factor that makes the difference between success and failure, between continued prosperity and a struggling existence, is—Management. The quality of the management is determined by the personality of the employer and his staff.

Thus it is that a distinguishing feature of most of the men who have made their mark in statecraft, commerce, and industry, and especially those who have played a leading part in building up prosperous businesses from small beginnings, has been their capacity to attract and retain the services of capable and trustworthy assistants. Perhaps this has been a gift of nature in some pre-eminent cases; others, profiting by their own experience, have laid themselves out to acquire it and have never regretted the trouble it entailed. Such employers, early in their business enterprises, realized the close connection between personnel and prosperity and have always appreciated the value of employing in their undertakings men and women of brains and character. Their own advancement and that of their business concerns has owed not a little to the care and discrimination they have exercised in the selection of their staffs. The thought and time given to the engagement of suitable persons for staff positions have been amply repaid in many ways.

### A Few Examples.

There is one large firm in the Midlands which owes its present prosperous condition almost entirely to the prescience of its founder in the selection of his staff. The firm in question is engaged in the merchanting of various classes of material, the purchase of which involves large commitments. The operations are on such a scale that a single transaction may result in a substantial profit or a heavy loss. Wise purchases, the originator of this business quickly recognized, were the key to success. Judgment in buying depended upon judgment in the buyer, so he gathered around him a staff of men each of whom was an expert in his own line and could assess the actual and potential value of material in bulk. Having got his men, he made it worth their while to stay. To-day the firm has business connections all over the world.

Another firm, whose products are of world-wide reputation, suffered severe losses through injudicious purchases, losses which need not have been incurred, at any rate on so large a scale, if its buying department had been staffed by competent and far-seeing men. A knowledge of world conditions and world markets, as well as of the material dealt in, would probably have averted this unfortunate result. In such circumstances, a man of long-range vision is a priceless asset, and the finding of him justifies any trouble it may involve.

A firm of grocers and provision merchants, which also manufactures certain classes of foodstuffs, recently had considerable quantities of one of its commodities returned by dissatisfied customers owing to a defect in the commodity which could not have occurred if the department concerned had been under adequate and competent supervision. In such a case, the immediate financial loss does not represent all the damage wrought.

The quality of the staff will, sooner or later, be reflected in the Profit and Loss Account, though that is by no means the only reason why it is worth while taking pains to ensure that that quality is of the highest. There are inevitable worries connected with the supervision and management of every business, but there is no

better guarantee that these will be reduced to a minimum than the employment of a capable and trustworthy staff. Development demands devolution: successful devolution demands the right type of men and women.

## The Staff Selector.

In many large manufacturing and distributive concerns, both in this country and in America, recognition of the importance of staff selection has led to the creation of a special department to deal with it. This department is known by various names—Employment Department, Appointments Department, Personnel Department, or Service Department—and in some firms the department has a wider scope than in others, but the function is practically the same. The head of this section, variously called the Employment Manager, Service Manager, Supervisor of Personnel, or Staff Engager, with clerical assistance if necessary, devotes the whole of his time to the selection and placing of personnel and the work connected therewith. In a business unit of smaller size, this would not be practicable; but the principles underlying the appointment of staff, whether undertaken by the proprietor himself, his manager or confidential assistant, can be applied with equally satisfactory results. Similar methods, with such modifications as may be required, will also be found useful.

Whoever is responsible for the selection or recommendation of staff should possess in some degree the same qualifications as a successful employment manager. He must be prepared to give time and thought to the matter if the establishment is to be manned by those whose personality will help to create or uphold its good name, guide its fortunes and worthily represent it in all the relationships and complexities of modern business. He must, of course, have an intimate knowledge of the establishment, its manufacturing or trading operations, and should have a clear conception of the requirements that must be looked for in those who are added to the personnel. He must be well acquainted with and seek to understand the members of the existing staff, especially the heads of departments under whom new entrants to the establishment will have to serve, and in consultation with whom positions in their departments will be filled. He should be methodical, tactful, courteous, and sympathetic. Above all, the staff selector must be a sound judge of character. In dealing with the more or less incalculable human element, mistakes are bound to be made by the most discerning of men, but the percentage of such mistakes can be kept surprisingly low. Where such mistakes do occur, it will sometimes be found that the selector did not act according to his own judgment, but allowed himself to be swayed by other influences. Some persons, with their quick intuitions, are naturally good assessors of human values; others become such as the result of much experience and close study. The successful staff selector must specialize in the knowledge of human nature. Socrates, long years ago, said that the proper study of mankind is man; and man is certainly the staff selector's proper study. He will, of course, devote some time to the study of psychology and will supplement the aid which the best textbooks can give by close observation of his fellow-men. In order to evaluate *a* man, the study of many men may be necessary. The staff selector's general reading should include a liberal course of Shakespeare and Dickens, both of whom had a profound knowledge of human nature coupled with an incomparable power of expression.

## Should a Firm Train its Own Staff ?

There comes a time in the history of most manufacturing concerns when the question arises as to the advisability of producing its own raw materials instead of buying them or of making finished parts that have hitherto been purchased. Analogous to that is the question whether it is better for a firm to produce its own personnel or to continue to rely upon outside sources, which usually means the general labour market. In a matter of this sort, it is not very helpful to generalize. The question must be settled according to the nature and needs of the establishment concerned. In an old-established and well-organized business, there is much to be said for the principle of training its own staff rather than engaging those who are already partly or fully trained. If the former plan be adopted, practically all the newcomers on the staff will be young people fresh from school. They will enter the establishment as apprentices or office boys, and in due course fill positions of varying degrees of responsibility—overlookers, foremen, draughtsmen, metallurgists, senior clerks, salesmen, representatives, shop assistants, managers, etc. If the practical experience gained in the office, shop, factory, workshop, or laboratory be reinforced by a concurrent course of study and training at a first-class continuation school, technical institution or school of commerce, an efficient personnel will, in course of time, be produced, *provided that care has been taken at the outset to select the right type of boy or girl.* Often the office boy or apprentice is the raw material out of which the secretary or manager is eventually fashioned. In any case, it is scarcely fair to the young people themselves and does not enhance a firm's reputation if, through lack of care in engaging them, frequent dismissals and changes have to be made. In addition, such changes are wasteful in more senses than one. The best methods of educating and training the staff cannot be discussed here, but the opinion may be expressed that, in the general education of the members of the junior staff, a

prominent place should be given to English and Business Economics. If the firm is engaged in industry rather than commerce, English and Industrial History are two valuable subjects.

Personal knowledge of a boy's or girl's home influence is very helpful, though not always possible. One boy, who had an aptitude for drawing, but was careless and untidy in his habits, secured a position in a drawing office. Through his carelessness, a number of blue prints were spoiled, and he was dismissed. The fault was that neatness and tidiness had not been inculcated in the home, either by precept or by example.

Some psychologists contend, and produce evidence in support of their contention, that the *intelligence* of the average person is fully developed at the age of 16. They maintain that intelligence, unlike knowledge, does not "grow from more to more." Even if this theory cannot be accepted without qualification, there is no gainsaying the fact that there are considerable variations in the standard of intelligence amongst youths in their early teens, and if the education and training afforded to those engaged are to produce satisfactory returns, it is vital that the most intelligent amongst those available should, at the outset, be selected for positions on the junior staff. Wise appointments of juniors to-day will prevent disappointments in seniors to-morrow. Yet too often boys and girls are taken into employment in the most haphazard way. Many employers are content to find out by trial whether young people are suited to their requirements. Far oftener than is the case, the trial would confirm the choice if that choice was the outcome of more consideration and investigation. If the waste that ensues from frequent staff changes could be brought home to those in authority, it would be a startling revelation to them. Furthermore, the best type of applicant is not attracted by a firm with a reputation for constantly changing the members of its staff, junior or senior. Young persons who start their business career with a firm and grow up in its service often feel and manifest a growing loyalty to the firm. That is a spirit that is worth cultivating on the part of the management.

### New Appointments.

But even an old-established concern cannot always supply its needs from the "loom of youth." Neither is it possible in every case to fill vacancies by promotion, though that course has much to commend it. When a new department is added to the business, or a fresh line is taken up, or the necessity arises for the services of someone with special qualifications not found among the existing staff, outside sources have sometimes to be tapped if the right person for the post is to be secured. One advantage of employing those who have been trained elsewhere is that they often bring with them new ideas and methods, some of which, at least, may be well worth adopting. In new businesses, of course, a staff already more or less trained and experienced must be engaged.

## CHAPTER II

## FILLING STAFF VACANCIES

An employer who is in need of a trained or experienced man or woman for his office, shop, workshop or factory, and who is willing to pay the market price for the kind of service he requires, takes steps to put himself in touch with the sources of supply. Incidentally, it may be stated here that efficient service is well worth its price, inefficient service is dear at any price, and underpaid service will sooner or later have unpleasant reactions that may not be anticipated at the time.

### Sources of Supply.

The great extension in technical and commercial education, including but not confined to what is sometimes called "vocational education," that has taken place during the last thirty years or so, besides contributing so largely to the personal fitness of those able and willing to profit by it, has opened a fruitful field for the recruitment of staff. The very fact that a person is in regular attendance at classes, as a whole-time, part-time, or evening student, and is earnestly seeking in this way to improve his mental equipment for business life, is in itself a recommendation. It is not contended, of course, that the personnel requirements of a business house can be adequately met by any educational institution, however successful it may be in satisfying demands of this sort. But employers and managers in need of capable assistants from time to time would be well-advised to keep in close touch with the principals of schools of technology, business training colleges and schools (both public and private), and polytechnics in their neighbourhood. In this connection it should not be overlooked that in many of these institutions there are trade classes which provide special courses of study for young people engaged in the distributive trades. The heads of such institutions are glad to co-operate with employers and to recommend suitable applicants for vacancies. Provided they are informed exactly what the requirements are, their recommendations are, as a rule, made with discrimination and, as far as they go, can be relied upon. Some of the most satisfactory appointments in the business world have been made originally through this medium. Students successfully and satisfactorily placed in business and industry reflect credit upon the institutions where they are educated or trained. New and promising acquisitions to technical staffs may often be recruited from the

Applied Science Departments of universities, which are reservoirs of talent if not of experience.

Amongst the sources of supply are the Ministry of Labour Employment Exchanges, the employment bureaus or registers of technical and professional bodies, and the general labour market which is generally tapped by advertising. The tabulated results of experience only can show which are the most productive and satisfactory sources of supply for the purposes of a particular firm.

There are employment agencies which, for a fee, act as intermediaries between employers seeking staff and employees seeking appointments, and which specialize in certain kinds of service. It is difficult to gauge the value of these agencies, but recourse to them should rarely, if ever, be necessary by firms who are sufficiently impressed by the importance of staff selection as to conduct their own investigations.

In course of time, another source of supply becomes available. A record should be carefully kept of suitable but unsuccessful applicants for vacancies. Later, such a record will sometimes obviate further search for an employee.

Personal recommendations by members of the existing staff are usually worth consideration. In this connection it should be remembered that contentment and harmony among the present staff will do as much as anything to ensure satisfactory additions thereto.

A word of warning here is necessary. The personal friends or relatives of an employer or staff selector will sometimes specially recommend a person for employment or will strongly press the claims of a particular applicant. If the employer is satisfied that the person thus recommended possesses the necessary qualifications for the post, well and good, but it is wise to be more than ordinarily sure that such is the case, for otherwise a somewhat embarrassing situation may afterwards arise. There is always greater reluctance to dispense with the services of such an employee, if found unsatisfactory, than if that employee had been engaged in the ordinary way.

## Advertising Vacancies : The Essentials of a Good Advertisement.

Where advertising is resorted to, care should be taken to select the best medium. For various obvious reasons, many firms prefer to recruit their staffs from the town or district in which the establishment is situate, and accordingly insert their wants in those newspapers that have a large local circulation. Sometimes, however, it may be necessary to reach a wider constituency and use is then made of the advertisement columns of the great London or provincial dailies which circulate throughout the country and are the recognized media for this type of advertisement. *The London Daily Telegraph*, *The Manchester Guardian*, and *The Yorkshire Post* may be mentioned as coming within this category, though the list is by no means exclusive. If the appointment to be filled requires technical knowledge, wide experience, high skill, or special business aptitude, an insertion in the technical or trade journals (too numerous to mention) will often attract the right type of applicant.

The wording of the advertisement is important and deserves more care than is usually given to it. The elimination of the unfit or unsuitable should start before the applications are written, i.e. it should start with the advertisement. A vaguely worded or incomplete announcement may ultimately achieve its purpose, but it will invite unnecessary trouble, gratuitously raise many false hopes and waste a lot of time. The first word should be descriptive of the kind of service needed—cashier, book-keeper, shorthand-typist, draughtsman, traveller, foreign correspondent, or whatever it may be—so as to catch the eye of those interested. Mention should be made of the nature of the industry or business, unless indicated in the leading word, and the qualifications required should be clearly stated. It should not be assumed that age, salary, references, or other particulars desired will be given by applicants : they must be specifically asked for. The more precisely the requisite qualifications are stated, the fewer the unsuitable applicants will be. If, for example, a draughtsman is wanted with a special kind of experience, or a shorthand-typist with ability to write at certain minimum speeds, the requirement should be mentioned. If the salary to be offered is already decided upon in accordance with scales or ratings which operate in the establishment, it is an advantage to state the amount, at any rate approximately. The majority of advertisers announce their wants under cover of a box number. Such a course is necessary if it is a case of replacement and secrecy is desired. It also prevents influence being brought to bear in favour of certain candidates and has other advantages. Nevertheless, it is significant that some highly reputable firms—firms which require a high standard of character and proficiency in their staff members—give their names when advertising appointments, and there is a good deal to be said for the practice. It is in itself an assurance that the advertisement is a *bona fide* one ; it does not deter possible candidates who hesitate to send their applications to an unknown destination, and it attracts applicants who do not think in terms of salary only, but who appreciate the value of permanency of employment or the nearest approach to security of tenure that business life affords. It will be found that usually a better and more satisfactory response is forthcoming to a "want" which discloses the name of the advertiser than to one inserted under a box number.

## Scrutinizing Applications and Selecting Candidates.

When the written applications for a vacancy on the staff are received, the staff selector himself will generally be able to undertake the process of weeding out. A record should be made and kept of the number of replies elicited by the advertisements in the respective journals, and a special note made of the medium through which selected and successful candidates apply. When, in course of time, a sufficient number of insertions have been made to enable these records to be accepted as criteria, they are a useful guide to judicious advertising in the future.

It will generally be found that, despite the most carefully worded announcement, there are a number of applicants who in certain essentials have failed to comply with the requirements of the advertisement. It matters not whether non-compliance be deliberate or simply careless, these applications can immediately be put on one side. So also can the letters of those applicants whose age is unsuitable, or whose experience has been too limited or not of the right kind. Applications from those who put a very low value on their services, equally with those who value theirs too highly, should also be rejected. Other sufficient reasons will be found for thinning down the list.

If the appointment be a clerical one, the manner of presentment will receive special attention. Neatness, form, style, and wording of the application itself will carry great weight. Clearness, conciseness, and courtesy are the three most commendable characteristics in the composition of an applicant's letter. Little things, each of which may be comparatively unimportant and trivial in itself, in their totality make their inevitable impression for good or ill on the mind of the reader and rightly influence his decision.

By a careful process of elimination, the applications can be reduced to three or four (say, six at the most), whose writers can be asked to attend for interview and possibly for a general or special test. These are the selected candidates or those who are put on "the short list," as it is sometimes called. From them, in conjunction with the head of the department or office concerned, the final choice will be made.

It will rarely happen that the employer, staff selector, or someone on his staff has insufficient knowledge or experience to winnow a pile of applications for a position which requires even technical or special knowledge. If, however, such an occasion should arise, special advice should be sought. Neither applications nor applicants can be accepted at their face value. If, for example, an expert accountant, fully qualified book-keeper, or competent cost clerk is to be engaged, the professional accountant (or a member of his firm) who audits the books might with advantage be consulted. Sometimes, in fact, he may be able to recommend the very man for the post—another possible source of supply.

## CHAPTER III

## NECESSARY QUALIFICATIONS

It should be an inflexible rule that no applicant for a staff position be engaged who cannot supply satisfactory credentials as to character. Ill fares the business of an employer who puts a low estimation upon this. The ability and knowledge of a candidate may to some extent be gauged from the application and the personal interview, and if needs be can generally be tested with fair accuracy; but though impressions may be formed or received, there are no appliances for measuring those qualities of mind and heart that are summed up in the word "character." Character can only be assessed as the result of personal acquaintance, the longer the better.

## References and Testimonials.

Credentials as to character may take the form of open testimonials, or, as is more frequently the case nowadays, the testimony of referees and especially of former employers, who should also be able to supply information as to ability. An employer is not legally bound to supply a testimonial to an employee on leaving, or when subsequently asked for one, but there is a moral obligation to do so if the employee has rendered satisfactory service. Willingness on the part of an employer to allow his name to be used as a referee by an old employee may suffice in the majority of cases, but, from the employee's point of view, it does not always work out well. It may involve repeated requests to his former employer, unfortunate delays when time presses, and, if in the interim there have been changes in the ownership or the management of the business, and there are those in charge who "knew not Joseph," the consequences may be very unsatisfactory for him. This sort of thing can be prevented by proper staff records, to which reference is made later under that heading. A written testimonial on leaving, with permission to refer in case of need, should be the prerogative of every employee whose record has earned it. It is a matter of regret that testimonials are sometimes carelessly given or loosely worded. For this abuse, which has done much to discount the value of testimonials in the employment market, there are only two satisfactory correctives: the application of the Golden Rule on the part of employers, and, again, the keeping of reliable records. Where copies only of testimonials are asked for, the originals should

be inspected before an appointment is made or confirmed.

## The Value of Character.

Trustworthiness is undoubtedly the most desirable moral quality in any employee, and trustworthiness is rooted in character. Professional, technical, or manipulative skill, however great, can never atone for deficiencies or weaknesses of character. Employers usually appraise rightly the value of high character in a member of the staff, knowing as they do that it ensures the best service of which that member is capable, but they do not always fully realize the influence of one person's character on staff colleagues and on the general "tone" of the establishment. Emerson's wise words crystallize all that needs to be said on this particular point and are worth bearing in mind: "Character teaches above our wills. Men imagine that they communicate their virtue or vice only by overt actions, and do not see that virtue or vice emit a breath every moment." The worth of a staff member may be summed up in these three—health, ability, and character, but the greatest of these is character.

## Health.

In America, many large organizations require applicants to undergo medical examination before engagement. That procedure would not be popular on this side, would increase expense, and in some cases would be impracticable. For special kinds of work and for appointments abroad it may be necessary. The staff selector's own impressions of a candidate's health, backed by careful enquiries, will generally be sufficient. It is not prying too closely into an applicant's private affairs to ask, e.g. what illnesses he has had (if any), and whether he has ever been medically examined for life insurance purposes and with what result. The answer to the latter question has an indirect usefulness, for it affords some indication as to the foresight and thrift of the applicant. An employer, however, is not justified in inquiring too closely into the health of a prospective employee unless he himself does all that is possible to ensure that his staff are working under reasonably healthy conditions.

## Experience.

The practical experience of similar work or duties is rightly rated high as a qualification for employment, but the value of experience, like so many things, is relative. That value does not depend so much upon the nature or extent of the experience as upon the way in which the person concerned reacts to it. One person is able to profit much more than another from a similar experience. Where an applicant has been, what he has seen, and what he has done, may be important, but they matter less than what he is, though they may have helped to make him what he is. It is the power of initiative and of adaptation in the personnel of a firm that lifts them and it above mediocrity. It is said of one eminent business man, recently deceased, who possessed in a remarkable degree the gift of attracting to his service the brainiest men, that he attached far more importance to their temperamental, their psychic qualities, than he did to either experience or technical knowledge.

## Educational and Professional Qualifications.

There is one prosperous private limited company the directorate of which is composed entirely of members of two or three related families. But no member of those families is allowed to enter the business without first satisfying certain educational requirements. Even though the youth may have had the advantage of a public school education, he must pass the matriculation or an examination of equal standard at least.

The value of a staff of well-educated men and women is being increasingly recognized. That there are some successful members of staff who cannot be thus described is undeniable, but their success is achieved in spite of their lack of education, not because of it. Looking at the matter purely from a business point of view, it will be admitted that, other things being equal, a good education—an education that does not end with school life—gives an employee a richer and wider experience than could otherwise be possible. Such a person, by reading and study, and by contact with other minds, avails himself of a wider experience than his own. This experience is condensed into principles. When confronted with a new situation or problem, which is a frequent occurrence in business life, he brings to bear upon it those principles—principles which are the condensed experience of the race as well as of himself. This is the advantage that the professional man so often has over the non-professional man. As a well-known educationist once said: "A good theory is the most practical thing in the world." For managerial positions, a good general education is often of more value than specialized training. Those members of an educated staff—again, of course, other things being equal—who are constantly coming in contact with customers and with the public, do certainly enhance the prestige and reputation of a firm. For this and other reasons, the staff selector must endeavour to appraise the educational qualifications of applicants.

The possession of professional degrees and educational diplomas, and certificates of proficiency in various technical and commercial subjects, where these have been granted by reputable bodies as the result of genuine work or tests, have a real value. Apart from their value as evidence in support of the educational

fitness of candidates, they usually indicate a certain amount of industry and application.

Far-seeing and enlightened employers—those who are in business not only for personal gain but also to render service—encourage the younger members of their staffs to continue their education by affording them facilities for attendance at day continuation schools or evening institutes, by paying fees (sometimes conditionally), and in other ways.

## CHAPTER IV

## MAKING THE APPOINTMENT

In a small establishment, the employer will generally be his own staff selector, and will, of course, personally interview selected candidates. Where this is not possible, the responsibility should be entrusted to a confidential assistant and (not *or*) the manager or superintendent under whose supervision the newcomer will serve. In any case, the employer himself ought to make a point of seeing and speaking to every new entrant to his establishment. This excellent rule induces greater care in selection and the effect on the staff recruit himself is wholly good.

### Interviewing Candidates.

It need hardly be said that, in staff selection, a satisfactory issue to a personal interview depends upon the interviewer as well as the person interviewed. The interviewer should have the candidate's application and papers before him, with notes of any points upon which further information is desired. The candidate should be received and treated courteously and, as far as possible, made to feel at ease. Confidence and frankness between the two parties should be aimed at and should be respected. From the employer's point of view, an interview with an unaccepted candidate has not been fruitless if it has secured his respect or increased his desire to join the staff. Questions put to the person interviewed can be very much to the point without being inquisitorial. The candidate's general bearing, expression of face, personal appearance, speech, and clearness or otherwise of replies should all be carefully observed; and the questions he may ask as well as those he answers will be self-revealing. The nature of the appointment, of course, determines the relative importance attached to various qualities. A pleasing address and readiness in conversation are valuable assets to any member of the staff, but they are of primary importance in a traveller or salesman. Experience teaches every selector, however, that sometimes a modest demeanour may accompany sterling qualities and capabilities and that mere glibness of speech may conceal serious defects.

If the interview has not been conducted in the presence of the departmental head specially concerned, he should certainly be given the opportunity of seeing the candidate. Each appointment made that concerns his section should at any rate have his approval. An employer would seldom be justified in taking the risk of overriding the opinion of a trusted manager in a matter of this sort.

Every interviewed applicant should fill up and sign a form or card which can, if deemed desirable, be filed for future reference. If he is engaged, it will form part of his permanent record. *See* "Staff Records" for a specimen.

### Testing Candidates.

The examination or testing of persons chosen for the higher posts on a firm's staff is almost unknown, the evidence of qualifications being sufficient without it. But the growing use that is made of tests for filling certain classes of appointments supports the contention that they do serve a useful purpose.

The tests to which applicants, and especially selected candidates, are subjected may be of three kinds: (1) An intelligence test; (2) a general knowledge test; (3) a vocational test. Opinions vary considerably with regard to the absolute and relative value of these tests. Extravagant claims for their predictive or selective value are sometimes made. On the other hand, scepticism of any cut and dried methods of measuring human attainments is frequently expressed. The truth is that tests, if used with discrimination, have a real if limited value. Where there is little to choose between a group of applicants or selected candidates, a test is sometimes resorted to in order to decide the issue. Even in such cases, however, it is not the sole criterion, though it may be the final one. The utility of tests for purposes of staff selection can best be determined by giving them a trial and by adapting them to meet special needs. The difficulty is to devise tests suited to the conditions under which candidates for business appointments are usually interviewed.

### Intelligence Tests.

These are sometimes called mental tests, and are designed to test the intelligence rather than the knowledge of candidates. In this connection, intelligence has been defined as "native ability," "inborn, all-round mental efficiency," "general adaptability to the new problems and conditions of life," "power to apply old knowledge to new situations." As far as staff appointments are concerned, this class of test is chiefly confined to youthful applicants. Importance is attached to the time occupied in working the test. The objection raised against this type of test, worked under time limits, is that it tests mental alertness or sharpness rather than real intelligence, giving

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the quick and volatile thinker an advantage over the slow and tenacious one. A great impetus has been given to mental tests as the result of the experience of the American Government in connection with recruits for the armed forces during the late war. It is stated that the findings and valuations of the psychologists, as the result of these tests, were afterwards confirmed in the majority of cases by the experience of those in command of the men.

The following are among the type of questions usually found in these intelligence tests. (Where necessary, the question is prefaced by simple illustrations for the guidance of the testee.)

1. Selection of best word (from several choices—generally four) to complete a sentence. This may be extended into narrative completion.
2. Supplying *opposites* to given words.
3. Insertion of verb to fit subject or of object to fit verb.
4. Verbal analogies (e.g., train-guard; tram-_____; daisy-flower; cabbage-_____; table is to furniture what lathe is to _____.)
5. Verbal sequences.
6. Arranging disarranged sentences.
7. Numerical analogies and sequences.
8. Simple arithmetical calculations and problems.
9. Selecting the best from a number of reasons for a given action.
10. Detection of absurdities, giving reasons; e.g.—

A soldier writing home to his mother said: "I am writing this letter with a sword in one hand and a pistol in the other."

A sailor who was put to haul in a rope from the sea found it so long that he gave it up in disgust, saying that someone must have cut the end off.

"I have always noticed," remarked the old man, "that if I do not die in March I am all right for the rest of the year."

11. Indicating relationships from a genealogical table.
12. Selecting correspondences between two lists of proverbs, English and African.
13. Logical selection; e.g. underline the two words which tell what the thing always has—

A bird always has
bones egg beak nest song.
Paper always has
edges envelopes printing surface watermark

14. Cipher tests.
15. Instruction tests. The following is *part* of such a test—

With your pencil insert a comma after one of these letters: *M S V W;* and a semi-colon after the shortest of these three words: *letter desk paper.* Then, if Whit-Monday comes in December, make a cross here_____, but if not pass along to the next question and tell where the sun sets_____. If you believe that Napoleon was an Englishman write *yes* here_____, but if not put in a number to complete this sentence: "A dog has____legs." Look at these two words: *invoice ledger.* If wood is heavier than lead write the one with "c" in it here_____, but if lead is heavier put here_____ the letter which occurs oftenest in these two words: *bonded tobacco.*

In order to reduce any advantage that may accrue from mere guessing, some examiners, in marking the test, deduct a mark for each error from the number awarded for correct answers.

A specimen test that has been tried with satisfactory results is given on page 227 of Mr. Daniel Bloomfield's *Employment Management* (Sir Isaac Pitman & Sons, Ltd.), and some interesting examples and useful information about mental tests will also be found in Dr. P. B. Ballard's *Group Tests of Intelligence* (Hodder & Stoughton, Ltd.).

## General Knowledge Tests.

These are not used extensively in making business appointments, but a paper on the following lines may be found useful for testing the general knowledge of candidates for a senior clerkship.

1. The correction and punctuation of a short passage containing spelling and grammatical errors. Reasons for grammatical corrections to be stated briefly.
2. If not already familiar with it, *where would you look* for the following information—
(*a*) The cost of cabling to Sydney, New South Wales.
(*b*) The name and address of the American Consul in the town of_____.
(*c*) The whereabouts and other particulars of a place called Iquique.
3. An estate agent's fees for letting property are as follow: For less than 5 years, 5% on one year's rental; if on lease for 5 or more years, 7½% on one year's rental. What would the agent receive for—
(*a*) Letting a house for 4 years at a rent of £26 per quarter?
(*b*) Letting a house on a 14 years' lease at a rent of £90 per annum?
4. A cricketer has an average for a season of 21 runs per innings for 15 completed innings.
(*a*) What must he make in his sixteenth innings to maintain his average?
(*b*) What must he make in his sixteenth innings to increase his average by 1?
(*c*) What would his average be if his score in the sixteenth innings were 29?
5. What are synonyms and antonyms? Give three examples of each. Mention the synonyms of "money"?
6. Distinguish between—
(*a*) Trade discount and cash discount.
(*b*) A current account at a bank and a deposit account.
(*c*) A credit note and a letter of credit.
7. State shortly what you know of—
(*a*) The Bank of England.
(*b*) Chambers of Commerce.
(*c*) "Lloyd's."

If the time available for working the above paper is too short, Question 6 or 7 could be omitted.

## Vocational Tests.

These may be very useful if carefully prepared and fairly adjudicated. Care should be taken to ensure that candidates for a particular appointment not only undergo the same test but, as far as possible, under exactly similar conditions. In order that some allowance may be made for the varying degrees of nervousness with which the majority of applicants are afflicted on these occasions, the test should be easier than the actual work to be undertaken. For example, in a speed test for shorthand writers the rate dictated should be at least 10 words per minute lower than the average rate required. At the same time, a test should be sufficiently difficult to bring out the capabilities as well as discover the weaknesses of candidates. The time occupied by each candidate should be noted and credit given for speed where combined with accuracy. The way in which the work is done, as well as the result arrived at,

should be closely observed, and marks credited or deducted accordingly. In the case of a typist, for instance, it is important to notice the method of fingering, and, in the case of a shorthand writer, the neatness and correctness of the shorthand characters. The objection to many of the tests that have been prepared for candidates for clerical positions is that they are too long or too elaborate. Simplification should be aimed at. For a shorthand-typist, a four or five-minute test, to be transcribed on the typewriter, will generally be found sufficient. For a post in the counting-house or that of wages clerk or invoice clerk, a few typical calculations will usually meet the need.

## Staff Records.

In the majority of cases a legal agreement between the employer and the new member of his staff is unnecessary, but in every case the terms of the engagement should be put in writing and a copy retained by each party. It may prevent subsequent misunderstanding.

It is important that the employer should keep records of the members of his staff. This is best done, unless the staff be very small, by means of the card system. The cabinet containing these cards should be locked and be accessible to the employer only, or a confidential assistant. Alphabetical arrangement will probably be found most convenient (with guide cards if necessary), as it saves a separate index. The following is a specimen of a Staff Record Card, which, of course, may be varied to suit special needs. If the junior members of the staff are numerous, a separate

**STAFF RECORD CARD**

Surname_____ Christian Names_____

Address (Home)_____

Address (Apartments)_____

Date of Birth_____ Married or Single_____

Engaged on_____ as_____

Department_____ Manager_____

Transferred or Promoted to_____ Date_____

Commencing Salary_____

Advances due_____ Advances granted_____ Date_____

Interviewed by_____ Employee's Signature_____
(Initials)

REVERSE SIDE OF CARD

Agency_____

Application, testimonials, terms of engagement, etc., filed_____

Last Employer_____

Last Occupation_____ Length of Service_____ to_____

Reason for leaving_____

Other Referees_____

Duties of present post_____

Notes as to character, conduct, etc._____

Left on_____ Reason_____

cabinet could be used for them under the charge of a responsible official. As each junior attains the age of 18 or 21, a record card for the senior cabinet will be made out for him or her. On the cards referring to juniors, space should be provided for recording their educational progress.

When a record card is filled up with information, a blank card, marked "No. 2," of the same size can be used for further particulars and placed immediately behind the original, which should have noted on it that the record is continued on another card.

It is advisable to use a differently coloured card for lady members of the staff.

In another cabinet the record cards of unsuccessful but suitable applicants should be filed under the respective occupations. These are useful when similar vacancies arise in the future. Each card should contain a reference to the file in which the application itself can be found.

The record cards of staff members who leave the firm's employment should be taken out of the "live" cabinet and put into the "left" cabinet in alphabetical order. The date and reason for leaving should be entered on the card.

These staff records will prove their usefulness in many ways and will be referred to frequently and for a variety of purposes.

## Relations Between Employer and Staff.

The retention of a trustworthy and competent staff is not less important than its recruitment. Having engaged the best men and women available for his purpose, an employer must try to get the best out of them. To do that he must trust them, and he will find that they almost invariably prove worthy of his trust. (This does not mean, of course, that he is to discard ordinary business prudence, such as the taking out of a Fidelity Guarantee for anyone entrusted with the handling of considerable sums of money.) He should show that he is interested in the health, happiness, and general welfare of his staff. No one can do more than he to promote happy relations and smooth working in his establishment. He more than anyone else can inspire in them an incentive to excel. His personal example will be infectious.

Satisfactory relations between the employer and his staff can be promoted by periodical conferences, which strengthen mutual confidence, and by that nice adjustment of staff to needs which gives every member of it plenty to do and no one too much, and by allotting to each, as far as possible, the work for which he is best fitted.

Salaries should be adequate and merit should be recognized. As already suggested, as far as possible, vacancies should be filled by promotion. The future as well as the present needs of the establishment in the way of personnel should never be lost sight of. The plan adopted by some employers of augmenting inadequate salaries by presents at Christmas time and other gratuities dependent upon their goodwill, is not commended. Faithful and efficient service is entitled to proper remuneration without any question of patronage.

Where the members of a staff work under the personal supervision of the employer, who is thus cognizant of their work and worth, deserved advances of salary should be granted without the necessity of their being asked for. A staff superannuation fund or pension scheme, where such is practicable, not only induces contentment amongst the staff by removing one of the most frequent sources of anxiety: it also promotes efficiency by making earlier retirement possible and accelerating the rate of advancement.

It is probably quite true to say that, as a rule, a firm gets the kind of personnel it deserves. If it has a good name for honourable and straightforward dealing and for just treatment of its staff, especially of long-service employees, it will deserve and generally command loyal and willing service.

*Kealeys, Ltd.*

A BUSY DESPATCH DEPARTMENT

M[illegible] R. M[illegible] & Co., Ltd.

SECTION 7

# The Law of Master and Servant

By R. W. Holland, O.B.E., M.A., M.Sc., LL.D., *Barrister-at-Law*

## CHAPTER I

## THE CONTRACT OF SERVICE

The relationship of master and servant is created by the parties entering into a contract, the one to employ and the other to undertake the employment offered. Something more is required as it is quite possible for one person to work for another without the position of master and servant arising. If I send my shoes to be repaired, or I employ a tailor to make a suit of clothes, the tradesman in neither case becomes my servant. Again, it is quite possible for another to become my agent without being my servant, as in the case where I employ a broker to sell shares. The broker is my agent but not my servant.

The true test of a contract of service may be sought in the work to be done, and it may safely be said that a man is a servant if his employer sets him to do work which remains under the control of the master. If I set a man to do repairs in my shop, and I am in a position to take him off the job and find other work for him, or to direct him in detail as to the manner of doing the job, that man is my servant; but if I give the job to a craftsman and leave to him the manner of performing the work, he is not my servant. That is, *a master is one who allots work to another and retains the power of controlling the work*, the method and time of doing it, and the details connected with it, although he may not in fact interfere with the work. The worker, whatever his station, be he labourer or manager, is a servant. This seems very simple, but difficulties do arise. Suppose an owner of a taxi-cab lets a cab on hire with a driver for a day. The hirer, a medical man, gives to the driver a list of calls and directions as to the streets to follow and their order. Whose servant is the driver? Has the cab owner given over the right to control the method of doing the work, and has the doctor assumed this control? Careful consideration will give the reader the answer. If I take a cab from Euston to Victoria, although I do not indicate the streets to be used, I am on a small scale doing what the doctor is doing. I do not take the control out of the hands of the driver, who has his instructions from the cab owner. Neither is the doctor in a different position. He is not the master. If he orders some act which results in negligent driving, he assumes the *rôle* of master and must answer for it, but apart from the interference, the legal responsibility for accident is not his, though the physical risk may be.

### Classes of Servants.

Servants may be classified under heads chosen according to work to be done. The chief of these are menial servants, labourers, workmen, and clerical and professional workers.

All classes of servants are not necessarily included in the above, but the classes mentioned broadly cover the majority of servants.

The term "menial servant" has come to be a term of disparagement, but the view of those who consider the word *menial* as implying anything low or cringing is wrong. It means simply *living in the house* or *within the walls*, and a menial servant is one who lives in his master's house or within his estate—a domestic, butler, groom, gardener, gamekeeper, but not usually a governess or a tutor.

Labourers formerly were servants engaged in agriculture, but to-day the term includes all those engaged on unskilled manual work in the heavier trades, on docks, on roads, and in foundries.

Workmen are servants engaged in trade, manufacture, and the like. The popular idea has been extended and the term is used in the Workmen's Compensation Acts to include clerical workers receiving less than £250 per annum.

Clerical and professional workers include clerks, secretaries, accountants, teachers, and other professional persons employed by others and receiving payment for their services in the form of salaries and not fees.

### Wages.

Workmen's wages are payable in cash and not in kind, and a shopkeeper may not pay to his employee, say, 15s. weekly with household groceries instead of 35s. This rule is under Acts of Parliament called the Truck Acts. Nor may he do this in a roundabout way, for the Shop Clubs Act forbids him to insist that his employee shall become a member of a shop club, unless such club comes under the Friendly Societies Act.

### Notice.

The method of payment of wages and salary and the amount of notice required to terminate



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employment depends on the kind of service, the custom of the community, and the usage of a particular trade or industry.

Domestic servants are usually paid on a yearly basis in monthly or quarterly instalments, but the weekly wage is becoming quite popular. No time is fixed during which the service is to last, but each party, master and servant, may terminate the hiring by giving one month's notice or one month's wages as equivalent. The fact that a yearly wage is paid in weekly instalments does not raise a presumption of a week's notice in the case of domestic service unless the parties are agreed. It is usually recognized that a fortnight's notice may be given to terminate the service at the end of the first month.

A domestic servant, living in, is entitled to food and lodgings, but not to medical attendance. In the case of sickness, however, such servant is entitled to the usual notice, the sickness not being sufficient ground for dismissal without notice.

In other cases, dismissal can take place apart from agreement by the giving of the proper notice. Whilst weekly wages generally point to weekly notice, it may be that a custom to the contrary exists, or that the trade has its own rules. In some cases, payment is made weekly for convenience, but workers are engaged by the day or hour. Where this is so, the employer has the right to tell a worker " to have his time made up," and finish forthwith ; but the employer should, in such case, take care that he is not guilty of " victimization," or he may find himself without workers.

Where a clerk is paid an annual salary, he may by custom of his particular branch of work, claim three months' notice or a month. Newspaper editors are entitled by custom to six months' notice. Teachers in elementary schools usually receive one month ; in private schools, a term's notice or a half a term ending with the term is usual, and it is to be noted that wages are paid on this basis. There is no definite rule as to *notice*, save that it *must be reasonable*, and what is reasonable depends upon a variety of circumstances.

In an old case almost one hundred years ago, an employee who had been in the same service as clerk for many years was dismissed on a month's notice. For nearly twenty years his salary had been paid quarterly and then, by arrangement, monthly. It was held that the engagement was a " yearly hiring," which could be terminated at the anniversary of its commencement by the giving of a reasonable notice.

A later case follows somewhat similar lines. A warehouseman was employed under a written agreement providing for a salary of £12 10s. *monthly for the first year*, with increase of £10 per annum up to a maximum of £180 per annum. Before the end of the first year, the warehouseman received a month's notice discharging him from his employment, but it was held that the engagement was for a full year and the man could not be dismissed earlier without reasonable cause.

If no custom can be shown, an employee at a yearly salary could claim a three months' notice as being reasonable in a yearly hiring, but it should be remembered that the salary must be really a yearly one and not merely " at the rate of " a certain amount per year.

If dismissed without notice or reasonable cause, a servant is entitled to damages for wrongful dismissal. The amount awarded would be the amount of wages to which he would be entitled in lieu of notice, less wages he might have earned if he had taken other work which offered. Any servant may be dismissed without notice for misconduct or wilful disobedience of orders. In exercising his rights under this rule, an employer should move warily, since, if he acts without just cause, he lays himself open to an action for wrongful dismissal. If he acts justifiably, the servant can claim the wages that have fallen due. If a clerk is paid monthly and is dismissed on the 10th of the month, pay day being the last day of the month, no wages are due, and technically none can be claimed, but it is wise to pay a proportion unless the clerk's fault has relation to money of which his employer is by the clerk's misconduct deprived.

## References and Testimonials.

References and testimonials in popular speech are used as meaning the same thing, and servants also use the term " character " as meaning a written document setting out their qualifications and moral worth. There is really a difference. When *references* are required, an employer usually means that he desires to know the name and address of some person having a knowledge of an applicant for work, and to whom he may *refer* for information. On the other hand, a *testimonial* is a document given by such a person setting out what he knows of the applicant.

On leaving the service of a master, it is customary for a servant to ask for such a document. There is no legal obligation on the master to comply with the request, but unless there is reason to the contrary, it is usually granted. Some employers prefer that reference should be made to them, in which case they are free to say quite candidly what they consider to be right. If they state what they truthfully believe, the document is privileged, and although the statements may not be in the servant's favour, they are not libellous. If they are actuated by malice, the servant may sue for damages.

CHAPTER II

## EMPLOYERS' LIABILITIES AND RESPONSIBILITIES

In speaking of the relationship of master and servant, we drew attention to the fact that servants are not necessarily agents and that the master is not liable on the contracts of a servant, unless he has made him an agent for the time being or for a particular purpose. The same rule applies in the case of injury. Usually a man must answer for the wrongful acts which he commits, and he cannot throw the blame on to another, but where that other has authorized the doing of the act he also may be called to account.

### Responsibility for Acts of Servants.

A business man may be made liable for the wrongful acts of himself, of his specially appointed agent acting in his business, as, for example, his traveller and representative, and of his servant in the strict course of his employment. Thus, if Jones, the grocer, makes slanderous remarks about a competitor in the hearing of a customer, Jones must make recompense ; or if in a similar manner Brown, who is Jones' traveller, slanders his master's competitor in order to obtain orders for Jones, then Brown is responsible, and as Jones appointed Brown his agent to make contracts for him, Jones must take the risk of Brown securing the contracts in an unlawful manner. If the caretaker of Jones' premises, in a fit of super-loyalty to his employer, tells a customer of Jones something likely to discredit Jones' competitor, it does not follow that Jones can be sued for the damage done, as the matter is not within the caretaker's employment.

The rule in cases of this kind is that the master must accept responsibility for every wrong committed by his agent or servant in the course of his service and for the master's benefit, even though the master has not ordered the act to be done, and even in cases where he has expressly ordered that the act in question shall not be done. Summed up, every business man is bound to see that his business is conducted in such a manner that others are not injured. *Injury* in this case means legal injury, as every business man who *legitimately* secures the trade of his competitor injures him in the popular sense. Legal injury, with which we are now concerned, is an interference with the legal rights of another as, for instance, the right to one's good name and right to safety of person and property.

Even in matters of fraud, the master may be liable for the statements of his servant if the statements are made in the course of his service and apparently to further the business of the master. False descriptions to goods and misrepresentations in contracts will come under this head. If the servant's statement is to serve his own ends, the master cannot be held responsible. A servant's statement as to the credit of another with a view to that other obtaining a loan is not binding on the employer. Thus, if a manager of a business, replying to an enquiry as to the credit of a customer, gives a wrong impression of the customer's stability, the proprietor of the business cannot be held responsible, even if it is shown that the customer's position was unsound. The master can be made responsible only on *his own* signed statement.

The principle upon which the employer is responsible for his servant's wrong-doing in the course of his service is best illustrated by examples. In a case where the owners of omnibuses issued instructions to their servants that they were not to race in competition with omnibuses of another proprietor, it was held that, where an accident occurred through neglect of these instructions, the owner was responsible for the wrongful act of the driver. In another case, however, where an accident occurred through the conductor driving, it was held that the conductor was acting outside the scope of his employment, and, consequently, the employer was not responsible for his wrong-doing. The question of the scope of employment is often one of a difficult nature. Where a van-man engaged by a trader is taking out goods, the trader is responsible for his conduct of the vehicle in his charge. Suppose, in returning to the stables, the vanman decides when near home that he will go a longer way round in order to deliver a parcel of his own, it would not be held that an accident occurring whilst on this frolic was one for which the employer would be made liable ; but the mere fact of going a longer way round will not release the employer from responsibility.

In another case, a carter had an hour allowed for dinner, but was instructed not to leave his horse and cart unattended. He was near home on one occasion and called there for dinner, leaving his horse unattended at the door. The horse bolted and did some amount of damage, for which the employer was held liable, as the carter was still acting within the scope of his employment in charge of the horse and cart.

### Liability of Master to Servants at Common Law.

The common law did not allow the servant to look to his employer for compensation for injury received in service, even when the injury was due to carelessness or default of a fellow servant. The rule was that a servant took the risks of employment as they came. Voluntary helpers came within this rule, although no contract of service existed. The rule still exists and can be pleaded in Court if the various Employers' Liability and Workmen's Compensation Acts do not apply. In a case where a highly-paid artiste in a theatre

was injured by the carelessness of a stage hand, no claim could be maintained against those responsible for production in the theatre, as the artiste was assumed to have entered into his employment with eyes opened to all possible risks, however caused, even by negligence of the lowest of his fellow workers.

If the employer is directly responsible for the injury, the servant has a right against him; thus, under the old rule, injury caused by the negligence of a foreman did not fix responsibility on the employer, but if the employer was acting as his own foreman he would, as employer, be responsible for the injury.

The *principle* of law just set out still remains, but great alterations have been made during the last fifty years, and the rule is now very much limited, to the advantage of the rank and file of workers.

## Employers' Liability Act, 1880.

In 1880, an Act of Parliament called the Employers' Liability Act threw upon the employer the duty of protecting his servant against defective plant or machinery used in the business or defective condition of "ways, passages, structures," etc. Similarly, protection was extended in case of injury due to negligence by a person in charge of work or issuing orders or directions on behalf of the master. Where accidents occur under these heads, the servant is in the same position as a stranger towards whom the employer has a duty to act with care.

## Workmen's Compensation.

The Workmen's Compensation Acts bring into English law new principles under which a *duty* is thrown on to employers *to compensate* workmen for "personal injury by accident arising *out of and in the course of the employment.*" Negligence and defective machinery do not enter into the matter, and the workman's right remains even if he is not entirely free from negligence. Nothing less than the man's own "serious and wilful misconduct" contributing to his injury will deprive him of his claim on the master. No other part of our law has given rise to so much litigation as Workmen's Compensation cases.

We have already noticed to what extent the expression "workman" has changed under legislative provisions. Under the Workmen's Compensation Acts the term now includes every person under a contract of service or apprenticeship with an employer, whether he is engaged in manual labour, clerical work, or other forms of service, except—

1. Persons whose remuneration for work other than manual labour exceeds £250 per year.
2. Casual employees, not employed in the employer's trade or business.
3. Outworkers.
4. Members of the employer's family living in the employer's house.

A manager of a drapery store receiving an annual salary of £300 is not a workman, and in case of injury he would not be entitled to compensation under the Workmen's Compensation Act, so that his only remedy would be to prove that the injury was due to the employer's negligence or that it came within the Employers' Liability Act. Similarly, a messenger sent to book seats at a theatre would not be a workman; whilst a tailor who gave out work to be done in the home of a worker would not be liable for injury to the worker in his home.

## When Compensation may be Claimed.

In all cases of injury to a "workman" by accident or disease due to the nature of the worker's employment, whether resulting in death or disablement, compensation may be claimed, provided the injury arises both *out of* the employment and *in course of* the employment. The words emphasized have a definite meaning. Should the employee be carrying out his duties in the employer's business he will have a right to compensation for injury received, but if doing something for himself during business hours the right is lost. Suppose an assistant is called upon to use a lift in order to obtain materials for his employer from another business man in the basement of the building occupied by his employer, an injury due to his own careless operation of the lift would entitle him to compensation unless his carelessness was also coupled with wilful misconduct. If, on the other hand, he is seeking materials for his own private use during business hours and he receives similar injury, the accident may be "in the course of" his employment, but it does not arise "out of it," and compensation cannot be claimed.

Where the accident is one in which compensation might be payable, no payment can be claimed in cases where the employee is guilty of "serious and wilful misconduct," but if death ensues the misconduct cannot be pleaded.

## Workmen's Compensation Insurance.

Any amount of care can hardly preserve the employer, and so Workmen's Compensation becomes an insurable risk. Every employer should take this into consideration in view of the liability being very heavy. An explosion or fire resulting in death of workers may, apart from the mental trouble caused, mean financial ruin to the small employer called upon to pay compensation up to £300 per head to the relatives of the parties killed by the accident.

Although the employer is insured against this risk, he remains personally liable, and the action to recover compensation is against the employer, who will settle or defend it on behalf of the

insurance company which is ultimately liable to the employer.

Compensation may be claimed for the benefit of the injured workman, and if death take place his dependants can claim. The term "dependants" means any member of his family wholly or partly dependent; that is, his wife, parents, grandparents, children, grand-children, or brothers and sisters looking to him for support.

## Amount of Compensation.

The amount payable depends on the period of disablement and upon whether it causes death. In the case of injury only the amounts originally fixed as weekly payments have been from time to time increased owing to the rise in cost of living, the payment being intended for the support of the injured servant and his dependants during his incapacity. The Act of 1906 fixes a weekly sum not exceeding 50 per cent of the injured party's average wage for the last year or shorter time in the same employment, subject to a second limit of £1 weekly. Thus, if a man earned on an average £3 per week during the six weeks he had been working in his present job, he would, in case of injury, be entitled to £1 weekly during incapacity, since 50 per cent of £3 is £1 10s., but the limit of compensation under the Act is £1. This is a meagre sum, and if the compensation is to effect its purpose it should be raised. By steps it has been raised, and now the claim can be made to 75 per cent more than the scale in the Act, so that in this case £1 15s. would be payable weekly. Persons under age cannot claim on this scale, but a limit of 10s. weekly is imposed, or 100 per cent of the average wage, whichever is the lesser amount. This scale is also entitled to the 75 per cent increase, making the maximum, in case of wage-earning workers under 21 years, the sum of 17s. 6d. weekly. After six months the payment of the weekly sum may be commuted by a lump sum payment, either on agreement or by arbitration under the Acts.

Where the workman dies, the amount payable depends on the absence or otherwise of dependants. If there are no dependants, £10 for medical aid and funeral expenses is the limit, but where there are dependants wholly dependent the amount is not less than £150 nor more than £300. Should the dependants be only partly so, there is no minimum limit but the maximum is £300. The actual sum payable is settled by arbitration or, if the parties fail to agree, the matter goes before a County Court Judge.

## Defences Available.

From what has already been said, it is clear that only few defences are available in an action to recover compensation. These are as follow—

1. The claimant is not a workman within the Act.

2. Notice of the accident was not given as soon as practicable. Usually, an employer is aware of any accident, but an injured employee should give notice, and the notice should be given before he leaves his employment. If he can show reasonable cause for not giving notice, this defence is useless.

3. The claim was not made within six months of the accident. Here, again, reasonable cause will remove the force of the defence. It is quite possible for a serious permanent injury to appear more than six months after the accident which caused it.

4. The accident was caused by serious and wilful misconduct of the workman, as in the case of the worker using a lift which he has been warned not to use. Again, this defence is valueless if the workman is killed.

5. The workman claiming for disablement was not incapacitated for a complete week.

## Sub-Contractors.

Under the Acts, when an employer engages another person with workmen under him to do certain work on the employer's premises, such employer is liable to pay compensation for injury to these workmen as if he himself had engaged and employed them. That is, he is liable to compensate the workers of a sub-contractor. Such workmen may claim from their direct employer *or* from his employer. If an employer sends out circulars, records, or accounts to a typewriting copying office, he does not become the employer of the girls engaged on the work, and he is under no liability for injury to them under the Workmen's Compensation Acts. Suppose he asks that the work shall be done on his premises, he becomes liable to compensate in case of injury, and the girl clerks who come to do the work may claim from the actual employer or from the person temporarily employing them.

# CHAPTER III

# HEALTH AND UNEMPLOYMENT INSURANCE

THE provisions made by the legislature for improving the lot of the worker do not end with saddling the employer with the liability to pay compensation for injury. The employer is now called upon to assist his employee by contributing to a compulsory scheme of State insurance in respect of health and, in most trades and businesses, in respect of unemployment.

## Health.

The man or woman worker must partly contribute, and the balance comes from the master;

the worker's share is stopped out of wages, and a stamp representing the combined contribution is attached to a card prepared and issued for the purpose by the Government department concerned. The cards are issued through the Post Office or through the society to which the worker belongs; the duty of procuring the card lies on the employee, but his failure is not a good ground for the employer failing to stamp the card, as temporary cards may be obtained to meet this contingency. Under certain circumstances the employee is exempt from contributions, but the employer is called upon to pay his own share. The rate of contribution is as follows—

Men, 10d. (5d. payable by the employer and 5d. deducted from wages).
Women, 9d. (5d. payable by the employer and 4d. deducted from wages).

In the case of adults (over 18) whose wages do not include board and are below 4s. per day, the total contribution is as above, but the employer pays it all if wages do not exceed 3s. per working day. If they are over 3s., but not over 4s. per working day, the employer contributes 6d., the balance being stopped out of the worker's wages.

## Procedure.

The sympathetic employer may be asked to advise his employee in case of ill-health, and it is well that he should know something of the procedure adopted. The large employer can usually afford to undertake staff welfare, and the small employer must compete by doing what he can to make the way easier for his workers.

The worker should be instructed to apply to the Insurance Committee of the area for a medical card. The necessary address can be found at the Post Office. When treatment is required, this card is produced to the doctor selected. Once selected, the panel doctor must remain unchanged until the 1st of June or 1st of December, when notice of a desire to change may be given to the Committee, in which case the change takes effect on the following 1st of July or 1st of January. The medical card gives instructions for proceeding in case of absence from home, and in cases where the worker's job takes him from place to place.

On being taken ill, the workman should ask the doctor for a First Medical Certificate, and he should fill in and sign the certificate on the right of the form. In case of accident, details should be given. The certificate should be sent to the society immediately. No benefit can be claimed for the first three days, but afterwards benefit is paid at the rate of 15s. weekly for men and 12s. for women after 104 contributions have been paid. Before 104 contributions are made, benefits amounting to 9s. weekly for men and 7s. 6d. for women are payable. Throughout the period of sickness, weekly Intermediate Certificates must be obtained and sent to the approved society, and the day before the doctor allows the workman to return to work a final certificate is sent.

## Unemployment Insurance.

The most recent form of protection provided for the worker is the scheme of insurance against unemployment provided by the Unemployment Insurance Acts, 1920–22. The method of subscription is much the same as in Health Insurance, but cards are not obtainable at the Post Office but through the Labour Exchanges. Temporary cards are not available, and the duty of obtaining the card is on the employee, but the employer is also bound to see that the employee provides the card. The card does not belong to the master, nor to the man. Technically, it is the property of the Minister of Labour and when filled with stamps at the end of the Insurance Year, it is changed for a new book for the following year. Where an employer has a number of employees, for convenience the employer may arrange the transfer in the area in which the business is situated.

At present the ordinary rates of contribution by the master and servant are—

Men, 1s. 7d. (10d. the employer and 9d. deducted from the man's wage).
Women, 1s. 3d. (8d. the employer and 7d. deducted from the woman's wage).
Boys under 18, 9½d. (5d. the employer and 4½d. deducted from the boy's wage).
Girls under 18, 8½d. (4½d. employer and 4d. deducted from the girl's wage).

The majority of trades are insured trades, but there are a few occupations not covered by the Act; thus, domestic servants, school cleaners, and professional men's office charwomen are not within the provisions.

The total payment in respect of an adult male for Health and Unemployment Insurance is 2s. 5d., of which the employer contributes 1s. 3d.—an important item which must be added to wages when cost of labour is being considered.

CHAPTER IV

# AGENTS AND THE LAW OF AGENCY

AGENTS may or may not be servants in the sense in which they have been recognized in Chapter II, but agents are always persons appointed for the purpose of representing another person and bringing that other into legal relations with third parties; or, briefly, an agent is a person appointed by a principal to make contracts for the principal. If the appointment is to make general contracts in the principal's business, and under the principal's direction, as in the case of a commercial

*By permission* *Messrs. Nissens, Ltd.*

INTERIOR OF A PLASTER-LINED PORTION OF A BUILDING FOR STEAM PRESERVING PLANT

traveller, the agent is the principal's servant also; but where the agent makes only special contracts, such as sales by an auctioneer, purchase of shares by a broker, and collecting of cheques by a banker, the agent is not the principal's servant.

Agents may be appointed (1) by a distinct contract giving them authority to act; or (2) by giving authority to do specific acts to an ordinary employee or servant not specially appointed as agent; or (3) by incidental duties falling upon a person by reason of his contract of service; or (4) by ratification.

An example of a special appointment of a commercial traveller and representative, and also one of a manager, will be given at a later stage. The second kind of agency is implied. A clerk is not necessarily his master's agent, but if he is authorized to buy stationery and to have the amount of his purchase charged to his master's account, he becomes the master's agent for this and possibly other transactions of a like kind with the same dealer. The third kind of agent is found in the case of an appointment of a servant, say a manager in a given trade in which it is customary to view the manager as a person authorized to contract on the part of his principal, to order goods, to give receipts for money, and generally to conduct his master's business.

Agency by ratification is rather complicated, but can best be understood by an example. If a servant having no authority from his master makes a contract for his master, there is no legal compulsion on the master to carry out the contract unless he has led people to believe that his servant has authority. Suppose the master sees that the contract is advantageous, he may adopt it and take responsibility on it. But in order that he may legally do this, that is, in order that he may ratify, the servant must truly have intended the master to benefit; that is, he must have acted as agent and had it in mind that the contract was really for his master and not for himself.

## Duties of Principal.

The duties of a principal towards his agent are to employ, to reward for employment, and to indemnify the agent for loss or expenses incurred during employment. In his turn the agent must act diligently for his principal's benefit, and apart from his agreed payment of commission or wage, he must make no secret profit out of his employment. Taking a reward is not consistent with zeal for his principal's business, and if the reward is taken or given corruptly, that is, to obtain an advantage at the principal's expense, the offence is a criminal one and may be punished under the Prevention of Corruption Act. It is an agent's duty to bring his principal into relationship with third parties who would like to buy his goods or sell goods to him. If Jay appoints Kay his agent to purchase goods, Kay is bound to make the best terms he can for Jay. Suppose Kay has in stock goods of the kind required by Jay, it would seem at first sight that Kay could fill the demand of Jay by supplying his own goods, but unless there is a custom of the trade, Jay could refuse to deal. It is Kay's business to introduce a dealer in such goods, and in offering his own he is naturally torn between duty and inclination—the duty to get the best terms for his principal, and the inclination to make the best profit for himself. If Kay can show a custom of the trade of which Jay is aware, then Kay could offer his own goods to Jay contrary to the usual rules of agency.

## Liabilities of Agent.

An agent acting as such incurs no liability on contracts unless he holds himself responsible, or there is a trade custom. If he forgets to say that he is acting as agent and the other party believes him to be a principal, he must answer as principal unless the third party elects to look to the real principal.

In dealing through agents, a business man should be careful, in making payments through the agent, that his debts are really discharged, for if the principal pays the agent and the agent, before settling up, becomes insolvent, the principal may be called upon to pay again, as he is liable for his agent's default if the agency is known to the other party.

## Casual Agency of Servants.

With regard to the casual agency of servants, the business man should remember that an authority once given requires to be expressly withdrawn. A master who allows his servant to make purchases on credit, to collect rents or debts, etc., on one occasion may be fixed with liability for loss if the servant acts again on another occasion, since goods ordered from the same tradesmen must be paid for and rents and debts collected must be allowed in credit. If a servant ceases to have authority the master *must* notify those who knew that he had once acted under authority.

## Informing Customers of Change of Travellers.

Where a traveller who collects accounts on his rounds is dismissed or leaves his employment, it is wise to send out a circular letter informing customers of the fact. The letter should be worded in such manner that no discredit is cast upon the late employee. It is well for the letter to be in the form of a solicitation for future orders, and the statement of the termination of the traveller's engagement should be made casually.

# Suggested Agreement between Employer and Traveller

*AGREEMENT made the first day of January One thousand nine hundred and between HENRY JAY Bookseller and Publisher of one hundred Downing Street in the City of Exminster (hereinafter called the Employer) of the first part and WILLIAM KAY of twelve The Grove Beckenham in the county of Kent Commercial Traveller and Representative (hereinafter called the Representative) of the other part*

*WHEREBY it is mutually agreed as follows—*

(1) *the representative shall enter into the employment of the Employer in the capacity of Commercial Traveller and Representative in the business of Bookseller carried on by the Employer at Downing Street aforesaid for the south-west postal district of the County of London and such parts of the County Borough of Croydon and the administrative County of Surrey as may be afterwards arranged by mutual agreement of the Employer and Representative*

(2) *the Representative's appointment shall date from the thirtieth day of January one thousand nine hundred and and shall be terminated at any time for four weeks' notice given in writing on either side*

(3) *the Representative shall devote himself exclusively to the service of the Employer in the capacity referred to above and shall not engage in any other business occupation or pursuit but shall give his whole time and best endeavours to the furtherance of the Employer's interests, treating as strictly confidential the knowledge of the details of the Employer's business acquired in virtue of his position as such Representative*

(4) *the Representative's remuneration shall take the form of commission which will be paid on all sales effected by him and accepted by the Employer as orders up to and including the date of the termination of this agreement but after that date the Representative shall have no further claim for commission The commission is to be payable to the Representative at the rate of Five per cent on all sales the said commission to be paid to the Representative when Ten per cent of the purchase price has been received by the Employer The Representative shall be called upon to refund commission paid in advance on any amount which later has to be written off in the books of the Employer as a bad debt but the Representative shall not be called upon to refund commission paid to him in advance except where the amounts written off have been so written off before the date on which his engagement terminates The minimum amount payable to the Representative during the year ending the thirty-first of January One thousand nine hundred and shall be Two hundred and eight pounds or pro rata if the Representative's engagement is terminated before the end of the year and against this minimum guaranteed amount the Representative shall be at liberty to draw at the rate of four pounds weekly and any balance which may be due to the Representative will be adjusted at the end of one year's service or earlier as may be mutually agreed*

(5) *the Representative shall be allowed reasonable travelling expenses between his home at Beckenham aforesaid and any of the places at which he may make calls in furtherance of the Employer's business*

**LETTER TO CUSTOMERS**

100 Downing Street,
Exminster.
1*st January*, 19....

Dear Sir,

May we take this opportunity to inform you of the recent publication of a new English Dictionary which we believe to be the most reliable and up-to-date book of its kind at present before the public. The price is low, being only Five Shillings, post free within the British Isles. If you are interested we should be pleased to send you a descriptive pamphlet, or our representative, Mr. William Kay, would be glad to call upon you with a copy of the work, which you could inspect at your leisure.

Mr. Kay is our accredited representative, and has succeeded to the position recently held by Mr. Frank Ray, who has now left our employ.

Assuring you of our prompt attention to your commands at all times,

We are,
Yours truly,
Henry Jay Book Co.

## Agent's Commission.

It is a common thing for an agent, traveller, or representative to bring a body of customers with him into a business. The advertisements in the daily press often make a point of requiring applicants for appointments to have a satisfactory connection, the advertisements taking the following form—

TRAVELLER WANTED—with good connection in London and the South for Midland firm of coal merchants. Reply stating age, experience, and terms.

Or—

PREMIER BELGIAN MANUFACTURER, organized for export trade, requires Representative for London with first-class connection, to sell dresses, blouses, teagowns, mantles. Send detail offers with references to A. de Blank, Rue Genevieve, Brussels.

If the person appointed as a result of an advertisement similar to either of the above is able to comply with the requirements as to connection, he will bring to his new employer a certain amount of entirely new business. It is quite possible that the customers so brought in continue to look upon the representative as their friend and look upon themselves as *his* customers and not as the customers of the firm. The question will arise when he leaves the employ of the firm, to what extent he is entitled to take commission on orders booked after he has severed his connection with the business. Further, we may ask, has he the right to take away the customers to another employer when he leaves ? It is quite clear that, where he brings no customers to his new employer, he may not on leaving solicit those customers and clients of whose existence he has become aware through his employment ; but whether he has the right to take back what he considers to be his clientele is another matter.

One thing is certain, if in a traveller's agreement there is an undertaking on the part of the employer to pay 5 per cent commission on all orders executed by the employer and paid for by the customers, and arising from the traveller's introductions, the employer will remain liable to pay commission on orders taken from the traveller's customers even after the traveller has ceased to be in his employ, unless there is a time limit in the agreement. It is, therefore, necessary that when payment is by commission, an arrangement should be made under which the traveller's claims can be definitely limited. There is no hardship in this, as the employer is entitled to cease dealing with customers introduced by the traveller in question. Some agreements give the agent the right to commission on all orders obtained from customers introduced by him whether such orders are booked by the agent or not, and it has been laid down that this is quite legal.

The general rule, apart from agreement, prevents the agent recovering commission on orders placed by his customer after he has ceased to be an agent. This has been the law since 1860, and applies even when the agent has introduced his own connection, such as an agent in the foregoing advertisement would be required to do. There is no implied right that commission shall continue after dismissal in respect of orders from customers from whom the agent had obtained orders before his dismissal. In a well-known case, an agent in soft goods had the representation of a manufacturer in certain towns. The representation was discontinued, and there was nothing either expressed or implied in the agent's agreement as to future commission. It was held that notice was sufficient to discontinue the engagement, and the agent would have no claim on future business.

## Suggested Agreement.

Commercial arrangements are always the most difficult matters upon which to give definite decisions as to the law. The difficulty generally arises on points of detail. Agency agreements and commissions are perhaps the best known of legal relationships, and their frequency adds to the complication. Commission agreements are commonly loosely and carelessly drawn, and are often of an amateur character. The amateur is very apt to use what appears to him to be legal phraseology, and in this manner adds to the difficulties of interpretation. Agreements should be carefully drawn by a skilled lawyer, properly advised as to the intentions of the parties. If the parties desire to make a plain agreement without legal intervention, let them use plain English words without any technicalities. A suggested agreement for the appointment of a traveller is given as an inset between pp. 112 and 113.

The suggested agreement does not make provision for the traveller keeping accounts and books. No such clause is included as would be found where the employer requires periodic reports as to calls and business done. It would be easy to incorporate such provision into the suggested

agreement. It should be noticed that an agreed minimum salary of £4 weekly is guaranteed for the first year, and the traveller is allowed to draw against this, but such salary is not in addition to commission. The method of payment is a matter for agreement and might well be salary with commission or salary only. In the latter case, a greater amount of supervision would be necessary, as the payment of commission in itself assures the employer that business will be followed up.

It is sometimes thought advisable that the representative shall undertake to deliver all correspondence into the hands of his employer immediately on receipt, and that correspondence relating to the business shall be addressed to the employer. Again, a clause may be inserted as to the remitting of money if the representative collects accounts. Such details as these are matters that should be carefully considered with the representative, and specific instructions given to the solicitor who draws up the agreement. When no professional advice is obtained in the drawing of the agreement, a letter addressed by the employer to the representative, setting out the conditions of the appointment, is perhaps the best form to adopt. This can be prepared in duplicate except for the first paragraph and the subscription at the end, one part representing the letter from the employer, and the other, identical except as to the essentials mentioned, being the letter from the employee confirming the conditions of appointment.

## Agreement on Appointment of Manager.

As a further example of an agreement between employer and employee, an outline agreement as between a business man and a manager is submitted. (*See* inset between pp. 112 and 113.)

SECTION 8

# The Financing of Business

By Max Rittenberg

## CHAPTER I

## SECURING CAPITAL

Since the essence of business is the turning over of money—making money grow—one might expect that the subject of financing would be dealt with over and over again in business literature.

But in point of fact, very little indeed has been published in Great Britain. There is certainly no authoritative work on the subject. There is no book to which the average business man can turn for information on the everyday financial needs of his business.

What is well known to bankers and financial men should not be kept secret; it should be a matter of general knowledge—and in this section an endeavour is made to compress some of the salient points which apply to a medium-size or small business.

Most men in business, with any real ambition, aim to make themselves their own masters—to own a business. And it is equally open to the man of 45, or 35, or 25, to start in a business of his own—because, while the older man possesses valuable knowledge and experience, the younger man usually has an abundance of vitality and enthusiasm which may be equally effective in the turning over of money.

### Initial Capital.

Successful businesses have been started on as little as £50 capital. Whatever the amount, the essential point is that the *initial capital* must be provided by the man himself, or by his immediate friends—people who have sufficient confidence in him to risk their money on his business capacity.

It is useless for anyone starting a small business to approach a bank or a professional financier for the necessary working capital. Banks do not lend money for that purpose. And prudent financiers always feel that the initial risk must be carried by the man himself. They want proof that he is able to run a business successfully, and this proof can only be shown in the form of accomplishment in a business where he is his own master. Having been a satisfactory employee is no guarantee of being successful as a captain of business.

Therefore, it is idle day-dreaming for any young man to imagine that the money he needs for a business of his own can be found from "professional capital." It has to come from "amateur capital"—either his own or that of his immediate friends.

### Forms of Capital.

A man's own capital can consist of any of the following forms—

1. His Cash Savings.

2. His Investments in Government Bonds, or Savings Certificates, or other Gilt-Edged Securities. Any of these can be sold for cash, or a bank will advance money on them.

3. His Investments in Industrial Shares. Again, these can be sold for cash, or if they are shares of well-known and sound companies, a banker will lend money on them—though not as much as he would lend on securities of the first-class.

4. Insurance Policies. The insurance company itself will at any time lend money on an insurance policy which has been in force for some years; and a bank will do likewise. Insurance policies are considered by banks to be an extremely sound form of security, up to their "surrender values."

5. Land and Buildings. Money can be raised on a mortgage—and mortgages of this character are frequently taken up by banks, also by insurance companies (particularly if the borrower is ready to take out a life or other insurance with the same company); and by certain solicitors who specialize in investing money for their clients in mortgages on property.

6. Household Furniture. It is also possible to raise money on a Bill of Sale on household furniture, but this is a measure which should not be resorted to unless in a desperate emergency. It would be carrying far too much worry on his shoulders if a man felt that a failure in business would involve the selling up of his home, and stripping him of practically everything that he and his family possessed.

All the above represent a man's own savings—or, at all events, money which has come to him from relatives. And this is the kind of capital which has to be risked in the financing of a new business. A man will be fortunate if he can induce friends to have sufficient confidence in him to advance further working capital—but it can be taken as axiomatic that no reasonably prudent

business man will put money into a venture unless the owner of the business is risking his own money.

## Sleeping Partner.

When money *is* entrusted to a young business, it is usually in the form of a "sleeping partnership." The money partner (or partners) draws interest on his capital—anywhere from 5 per cent to 10 per cent—and, in addition, is entitled to a share of the net annual profits of the business—this share being a matter for mutual arrangement. In addition, the partner may ask for a lien or mortgage on certain assets of the business to be established, such as the plant and machinery to be bought with his money.

These are the customary terms for extra capital for a young business—whether this capital be put up by immediate friends, or whether it be obtained from people who reply to advertisements on the subject inserted in the daily newspapers. But if the latter method of obtaining capital be resorted to, it should be realized that the proposition must be a remarkably attractive one to induce strangers to lend their capital without the security which is afforded by an established business, which possesses already its *existing assets* of furniture and fixtures, its stock of goods, or its plant and machinery, together with the expectation of future profits which can be reasonably gauged from the figures of profits for a couple of years back.

## Extra Capital.

When a business has actually been established for some years, and is being run at a profit, then the sources of money widen out. It is then possible to get extra capital from—

1. Outside Investors, with whom one gets into touch by advertising, as mentioned above; or through partnership agencies, which exist in every city of any consequence; or through solicitors and chartered accountants who specialize in bringing capital and business opportunities together.

2. Private Financiers. This would, of course, be "professional capital"—and the terms of lending would probably be very stringent. A professional capitalist does not lend his money as a speculation, like a man investing in the ordinary shares of an industrial company—but lends that money with the same carefulness that a prudent trader buys goods; and he lends his money in a way which will bring him in the best possible returns, just as a trader sells his goods at the best possible price he can obtain.

3. Banks. A man's bank is the most likely source of all; and in order to obtain the co-operation of a bank to the fullest degree, it is highly essential for a business man to understand the attitude of a bank towards the granting of loans.

## Banks and Loans.

A bank is in the position of a trustee for the money deposited by its customers. The money it lends is its customers' money. It acts as a clearing-house or money-pool between those who want to lend and those who want to borrow. And the cardinal principle of banking, especially of the very sound British banks, is that the bank shall so employ the money entrusted to it that it would be able to repay its depositors in full at any moment they demanded the return of their money. Its loans and investments must be "liquid"—capable of quick realization into actual cash.

It is not entitled to speculate with its depositors' money. In fact, if it did so, there would be an end to public confidence in banks. The notorious cases of bank failures, such as that of Farrow's Bank in 1920, have been due to speculation of the depositors' money, covered up in the balance sheets by statements designed to suggest that the money had been soundly invested or prudently lent—*not* speculated.

Therefore, a bank must have such securities for its loans as can be turned into cash at a moment's notice. If you offered a bank as security a stock of raw material which cost you £1,000, the bank would not lend £1,000 upon it, because this commodity might fall heavily in price in a couple of months' time, and the loan would then become speculative on the part of the bank. In order to protect itself and its customers, the bank will lend only part of the cost price, which may vary from £500 to £850, depending on the character of the merchandise and its ready saleability, together with the possible fluctuations in the commodity as shown by past history.

One should realize that this banking attitude towards loans on commodities is sound and in the best interests of the whole community, and one should never ask or expect that a bank will loan up to the full cost price of commodities in the case of a small business, or one which has only been established a few years.

The cases where banks lend as much as 90 per cent to 95 per cent of the cost price of goods, are cases where the borrowing firms are old established and are rated as having exceptionally high credit. That is to say, they possess security in the form of property which has been written "down" drastically in their balance sheets, and trading goodwill which is probably assessed at *nil* in their balance sheets—thereby giving them the possession of a "hidden reserve" which could be utilized in times of extraordinary emergency.

Apart from lending on raw material or semi-finished material, a bank is also prepared to lend on land, buildings, machinery and plant, at a valuation made by its own assessors. Or, more usually, it will lend in the form of a "floating charge" on all the assets possessed by the business—including the above, and including the stock of

goods or raw materials in process of being converted into finished goods. The convenience of this to the business man is that he can change his assets about from one form to another—as from raw material into finished goods—without having to pay off loans and contract for further loans every couple of months, according to the position of his buyings and sellings.

## Mortgages and Debentures.

A bank may take up a mortgage or debentures on the fixed assets of a business, but it will not usually lend money on the ordinary shares of a young business, because ordinary shares would be speculation and not a sound security.

Loans by insurance companies on the security of mortgages and debentures usually follow the same general principles as that of the banks. An insurance company is also a trustee, for the money of its policy holders. But an insurance company is sometimes inclined to be more elastic in lending, in cases where it can pick up valuable insurance business from the individual or firm to whom it lends the money. This is a point worth remembering. It may form an extra inducement which will just manage to secure the loan.

## Discounting Bills.

From a bank one can also obtain temporary working capital by the discounting of one's bills receivable, if these bills are accepted by firms of standing and credit. Such bills can also be negotiated through a bill broker. The discounting of them forms a perfectly ordinary transaction. A bank or bill broker is protected in two ways: When the bill becomes due in one, two, or three months, it is presented to the acceptor for payment; and if the acceptor fails to pay the bank or bill broker, the latter can call on the drawer of the bill to reimburse.

A bill is really a joint guarantee from both the parties who sign it, for the payment of money at a due date—and it binds the credit of both of them into the form of a negotiable document, one on which money can be raised for a couple of months.

## Integrity of the Borrower.

A further point has to be borne in mind if one is to realize the attitude of a bank, and take full advantage of the possibilities of financial co-operation which a bank can give. This point is: the bank does not look only to the material security offered. It looks also to the *general integrity and reliability and business capacity* of the borrower.

The business man cannot establish this feeling of trust in the mind of his bank manager in a moment. It is a matter of years, during which he has been careful to honour all his obligations, to keep his promises to the letter, and to make it perfectly clear that he resorts to no form of trickery in his trading.

A bank manager knows that if a business man uses questionable methods in regard to any one of his customers or business connections, he is liable to turn those same questionable methods against the bank at some future time when he is in a desperate emergency—and the bank takes no risks of that kind, even if the securities offered are worth more than the amount of a loan at the time it is made. A sudden slump might arise, or some unforeseen catastrophe in the man's business, and it is during such times of emergency that the man's general integrity protects the bank (that is to say, the money of the bank's depositors) from loss.

## Branches of Banks.

In the British joint stock system of banking, where a bank may have a thousand or more branches, loans are not left to the discretion of the individual branch manager. He is not allowed to make loans on his own responsibility. He has to report requests for loans every day to a Loan Committee at headquarters, giving at the same time his recommendations. The Loan Committee then pass on these requests for loans, basing their decisions not only on the recommendations of the branch manager, but also on the state of the bank's liquid resources at the time, and on the general conditions of the money market.

They survey all the requests for loans from a thousand or more branches simultaneously, and if their decision is adverse in a particular case, it may be due to reasons quite other than the value of the security or the reliability of the man who wants to borrow.

Therefore, in approaching a branch manager for any form of loan, one must realize that one is dealing with a spokesman of the Loan Committee at headquarters. The decision he will give, after reference to headquarters, will not depend on his personal predilections or whims. It will be based on broad general principles laid down by the very sound and far-sighted men who control our great banks. It would be entirely unreasonable to feel aggrieved because a branch bank does not stretch points in one's favour. One should not expect to ask "favours" from a bank—but only to borrow money from it on the general principles of lending which are outlined above.

And this being so, the sound business man looks ahead, and endeavours so to arrange the financing of his business that he will not be forced to call on a bank at the last moment for a loan of a "favour character"—which will be turned down. He will plan his commitments ahead, and be ready with security of an acceptable character, so that, when he goes to the bank for a loan, he is practically sure of obtaining it.

Of course, there are certain methods or devices for getting round a "tight corner" when a bank loan is impossible; these are dealt with in Chapter V.

CHAPTER II

## OBTAINING CREDIT

CREDIT from a wholesale or supply house is the lending of goods for one month, two months, or three months—according to the particular credit terms. This means, in essence, the lending of money for that period, with the great difference that the wholesale or supply house is ready to run a certain amount of risk which a bank definitely would not undertake. The goods are lent without security other than a general feeling of confidence in the customer's ability to sell them at a profit and pay for them at the due date.

If asking for credit, one has, therefore, to remember that one is really asking for a loan of money, without security, on the strength of one's honesty and general business capacity. Credit is a definite favour to a man who has not already established a profitable business, and should be regarded as such—and the total amount of credit to be expected for a business established some years must essentially be based on what that business has turned over in the past and what it can reasonably be expected to turn over in the future.

### The Credit Manager.

The man who passes on the subject of credit in the wholesale house may be the head of the firm himself, or some executive to whom that special function is assigned. Whichever it be, let us for short speak of him as the credit manager.

Many credit managers regard their duties somewhat in the same light as a banker. They have goods to lend, but these goods do not essentially belong to them. The goods belong to the manufacturers who have entrusted the firm with these goods for re-sale on a promise of payment of money in so many months' time. Therefore, whenever the wholesale house lends goods to a business man, it is in reality a loan from the manufacturer, made at the discretion of the credit manager of the wholesale house.

But unlike a banker, a credit manager is prepared to take a certain amount of risk. He is prepared to incur a small proportion of bad debts. These may amount to perhaps ½ per cent of the whole turnover of his business. If they total to more than that in any year, then his judgment in giving credit (or his method of collecting accounts) has been bad, and he is called to account for it.

He takes risks, but endeavours to reduce these risks to a minimum. And in doing so—in endeavouring to keep bad debts below the danger mark—he is serving the general interests of the community, and he is entitled to take all the precautions and obtain all the information which will assist him to a proper judgment.

### Questions Asked by the Credit Manager.

In the case of an established business, he asks as a matter of routine for two or three trade references—so that he can find out how the applicant for credit has paid his bills in the past. It is also usual for him to get a further line of information from a Mercantile Credit Agency, or from a Mutual Protection Association in his particular trade.

In the case of a business which has just been established and where there are no records to go upon, he is entitled to ask very searching questions—and in many cases he does not hesitate to do so. Such questions should be answered fully and frankly, even if they seem personal and almost prying. For instance, some credit managers want to know the scale of the man's personal expenditure—how much he spends on house rent, whether he has indulged in the luxury of a motor-car, how much he proposes to pay himself as a "drawing account" out of the business, etc. This is a perfectly legitimate way of gauging the business prudence of the applicant for credit.

Also, he may want to have full details of the applicant's experience in his particular trade, and his qualifications for the running of a successful business on his own account.

And, equally important, he will want to know the location of the shop it is proposed to open—whether it is situated in a likely neighbourhood or not, and what sort of local retail competition has to be faced. In the case of a small manufacturing or contracting business about to be started, the competition to be faced will be more than local, it may even be nation-wide; and this point has to be considered by the credit manager in determining how much credit shall be allowed.

Still further, he is entitled to know what amount of credit has been or is being granted by other wholesale or supply houses—so as to make sure that the applicant is not trying to strain credit too far, and build up a business too quickly on an insufficient working capital of his own. The wholesale houses can no more be expected to finance the greater part of the burden than a "professional capitalist" will.

The above fairly represents the attitude of mind of a great many credit managers—and this viewpoint should be thoroughly realized by the trader who asks for credit. He should have an approximate idea as to how much credit he is *entitled* to ask for on various lines of goods; and should not make requests which are beyond the normal possibilities of trading in his contemplated business.

### Forecasts.

His past experience in the trade, as an employee, will have taught him—or *should* have taught him—how quickly goods can be turned over; what percentage will probably remain unsold at the end

Section of Factory, Messrs. Morland & Impey, Ltd.

of a couple of months; and how much cash in hand he is likely to have at the end of every month for six months ahead, wherewith to pay his wholesalers' bills as well as meet all the running expenses of his business.

The fixing of reasonable figures of possible sales, and a careful analysis of coming expenditure, are the bed-rock basis on which to make requests for credit.

Quite a number of people go into business without making such detailed forecasts ahead; or omit to put down on the debit side a full list of the items of coming expenditure. In preparing such a forecast, it is advisable to ask oneself: "Have I allowed for all the following?"—

*Rent, Rates, and Taxes; Drawing Accounts of Self and Partner (if any); Salaries of Staff; Wages of Workers; Staff Insurance; Fire Insurance; Plate Glass Insurance; Workmen's Compensation Insurance; Staff Insurance (weekly stamps); Office Stationery and Sundries and Routine Printing; Special Sales Development Printing; Newspaper Advertising; Postages and Telegrams; Telephone Subscription and probable charges for Telephone Calls; Light and Heating, including Outside Lighting if a shop is to be lighted up at night; Material used in the Packing Department; Expenses of Despatch by Carrier or by Rail; Travelling Expenses of Self and Partner; Wastage in Material and Spoilages; Annual Auditor's Fee; Percentage of Turnover to be Allowed for Bad Debts; Contributions to Local Charities and "Events"; Miscellaneous Sundries; and Unknown Contingencies.*

The item of "Unknown Contingencies" is the one which is most frequently left out. Such an occurrence as a railway strike, or a coal strike, or even a small local strike, may throw out all one's calculations of possible sales in a retail business—or, in the case of a manufacturing business, wreck the production schedule. A general election or other political complication may cause an entire new current of trading for at all events a couple of months. Totally unseasonable weather (which happens not infrequently!) may also vitally affect one's forecast of sales.

To cover all these adverse possibilities, which are entirely outside one's governance, and are utterly different from risks which *can* be insured, and distinct from the item of Miscellaneous Sundries, it is prudent for a young business to add 10 per cent of the total expenditure calculated from all the other items.

To show a credit manager detailed estimates of expenditure of this character, and at the same time an estimate of sales, roughly itemized into departments, is to give him material on which he can form an idea of your business judgment—because he will know roughly what these figures should come to, from experience of many other businesses, and he will be able to see if your estimate is a reasonable one, and likely to work out in actual trading.

In the case of an established business, such estimates, based on past records, and balance sheets for the last couple of years, are strong armour in approaching a bank for a loan, as well as asking a wholesale house for extra credit.

Every prudent business man with long experience is more impressed by sets of sound figures than by any amount of "glittering generalities" and "big talk."

The basis of credit is establishing confidence in the mind of the credit manager that—

1. You have the capacity to turn goods into money at a profit.
2. Your marketing possibilities are good at the time when credit is asked for.
3. Your estimates of expenditure and revenue have a sound basis in figurings.
4. Your reputation for honesty and straight dealing in the past has been a clean one.
5. And, therefore, as a culmination of all these factors, you will be both able and willing to pay the wholesaler's bill when it falls due.

He wants to feel confident that you will be *able* to pay; and assured that you *will* pay.

## CHAPTER III

## PLANNING ONE'S BUDGET AHEAD

In preparing estimates ahead—a "budget" of the business—the corner-stone is Probable Sales.

In the case of an established business, it is of course possible to make a fair calculation from the results of trading in past years, and the "seasonal fluctuations" which are already known and can, therefore, be allowed for.

Many firms do this very systematically—by first preparing a Sales Chart, on which is shown the average sales month by month for the past couple of years, or for the last trading year. A "target" is then set—a so-much-per-cent increase of sales for each month during the coming twelve months—and all departments are notified, so that they may pool their joint efforts to reaching or exceeding the sales target for every month.

Where a business is capable of being advertised, to the public or to the trader—and practically every business can be developed by press or postal advertising—then it is important to figure out an advertising allocation which is to help in producing the desired sales quota.

Or, in cases where reliance has to be placed on travellers rather than on advertising, each traveller is set an increased quota for his district, or extra travellers are taken on. The cost of the extra travellers corresponds to the cost of the extra advertising in the case considered before.

## Gross Profit.

In order to arrive at how much can be spent on advertising (or on extra payment to travellers), the first step is to determine the possible gross profit on the goods, and the total running expenditure of the business.

For instance, a retail shop in most lines of trade reckons 33⅓ per cent off the selling price as its normal gross profit. This applies to staple goods sold "straight"—without any reduction, or rebate, or premiums, or "give-aways." If any of these methods of stimulating business are used, or if "bargain sales" are to be staged at certain times in the year, then the reductions off the 33⅓ per cent gross profit should be calculated ahead, and *should be charged up to "Advertising."* They are, essentially, a form of advertising expense, and any one in control of the firm's advertising or sales promotion should be made to include these reductions as part of his general advertising allocation.

There is no more frequent source of leakage in a business than failure to allow ahead for these price reductions, or to let the financial responsibility for them be spread over several different department heads.

A well-known London retail drapery store, which has developed from small beginnings into a large and highly successful house, claims that it has "never advertised"—that is to say, never in the Press. Its policy has been to provide an advertising allocation, and to spend that money in reducing the prices of goods, with the idea that it would establish a reputation for very cheap prices, and be recommended from mouth-to-mouth. By keeping rigidly to this policy, it has made it successful. The point of the instance is: *Price reductions are charged up to "Advertising."*

## Typical Budget Figures.

Below are some typical figures of "budgetting" for a retail business, where it is proposed to aim for a 15 per cent increase in business during the coming twelve months.

It will be noted that the general overhead expenses are expected to increase only by £485 because the extra work can probably be carried by the same staff as last year—or perhaps with the help of a couple extra clerks or shop assistants. The items of Stationery and Printing, and Postages and Despatch will be heavier. Also, Advertising (including Price Reductions) will be estimated higher, but at the same percentage figure of 9 per cent as last year.

These expenses ought not to be so heavy as to swamp the extra profit from the extra trading. If it should turn out that they do, then there is something fundamentally wrong with the business plans of the directing head, or the methods of sales development employed. It *should* be possible, in a well-conducted business, to increase the turnover without increasing expenditure to the same extent, thereby rewarding the owner (or partners) of the business with a greater net profit for the business risks he is taking in planning for an increased turnover and incurring an increased expenditure.

## Manufacturing Business.

In the case of a manufacturing business, the budgetting should fall under two separate and distinct divisions.

A manufacturing business does two things—it converts raw or semi-finished materials into goods; and it then sells and distributes these goods. The two functions are distinct. They should be handled and financed separately. The expenditure of the factory needs to be kept in books distinct from the expenditure of the office and selling organization.

The factory should make a profit on the goods it hands over to the selling organization; and the latter should make a further profit on these goods, through its selling and distribution.

| Main Items of Budget | Last Year. | | Target for Coming Year. | | |
|---|---|---|---|---|---|
| | £ | Percentage on Sales | £ | Percentage on Sales | Notes |
| Sales | 41,000 | | 47,160 | | Target increase of 15% |
| Gross Profit | 12,300 | 30% | 14,148 | 30% | Same percentage as before |
| Running Expenses apart from Advertising | 6,765 | 16·5% | 7,250 | 15·37% | Estimated increase of £485 |
| Advertising Expenses, including Price Reductions | 3,690 | 9% | 4,250 | 9% | Same percentage as before |
| Total Expenses | 10,455 | 25·5% | 11,500 | 24·37% | |
| Net Profit to Owner or Partners, apart from their "drawing a/cs"; or for placing to Reserve | 1,845 | 4·5% | 2,648 | 5·6% | |

By having the two divisions of the business keep their accounts separately, and budgetting for their sales and expenditure separately, one is able more easily to put one's finger on a weak spot in the general organization, and to keep both divisions "keyed up."

A fair method of figuring is to take the normal net profit of the two divisions combined, and in the budget to split it half-and-half between the factory and the selling organization. Each has then to govern its expenditure so as to reach the estimated net half-profit.

It is equally important to have records of production and sales results and total of expenditure prepared monthly for the head of the firm (in certain cases, weekly), in order that he may be able to steer the ship correctly, and "trim sails" to the prevailing wind.

The business of the factory end of a manufacturing business is to produce, and go on producing at highest capacity and, therefore, least proportionate cost; but if the goods are piling up on the sales division, it will obviously mean that valuable capital is being tied up in these goods, and perhaps leading to a crisis in the firm's general finances. If the selling organization cannot keep pace with the factory, then production must be slowed down.

In the analagous case of the retail shop, if sales figures are falling below the estimates, then buyings of fresh goods must be restricted, whatever the temptations to buy.

Over-production in a manufacturing business, or over-buying in a retail business, not closely regulated in accordance with the conditions of the selling market as they exist from month to month, are a frequent cause of "failure."

Successful business men do not determine on a line of policy and then go ahead with it regardless of external conditions. They look on it as a *provisional* steering course, and meanwhile watch the sales figures of the business closely from month to month, or even from day to day, in order to feel the currents of public demand. Moreover, they endeavour to "keep an ear to the ground," to listen for advance warnings of slump or boom. (*See* Chap. VII.)

In times of difficult trading, when no period of increasing prosperity is clearly in sight, it is more than ever necessary to go forward carefully, and be prepared to switch one's line of action at a day's notice.

## CHAPTER IV

## PREPARING AHEAD FOR FINANCIAL NEEDS

If the sales of a business and the incoming of money kept even step all the year round, it would be a very simple matter to plan one's financing so as to meet expenditures as they become due.

But this condition applies to scarcely any, or very few, businesses. Nearly every firm has to reckon with "seasonal fluctuations," apart from unforeseen contingencies. In the retail trade, there is sure to be a steep "peak" in sales in December and around Christmas; and also at those periods of the year when it stages a Special Sale.

A manufacturing business experiences the same kind of fluctuations in demand, thrown back at it from the retailer or the ultimate consumer.

### Tabulating Coming Expenses.

There are a great many firms whose fluctuations are so strongly marked that there are certain slack-water periods in the year when they have to *trade at a loss*, because the running expenses wipe out the gross profit on the sales which are made; while at other periods of the year they sell very heavily, and there is a considerable surplus of cash-in-hand. Therefore, the main financing problem of every business is so to arrange promises-to-pay that they will more or less coincide with dates when cash is coming in rapidly; or else to have a General Reserve to fall back upon to provide the necessary cash for the difficult periods.

This needs concentrated thinking ahead. It is always advisable to chart or tabulate the coming expenditure month by month. Ordinary overhead expenses may be fairly even from month to month, but items such as rent, rates and taxes, gas and electricity, will crop up quarterly, and purchases will vary considerably according to the time of year.

If these totals of "payments out" be then compared with the estimates of sales and "payments in," there will be differences in favour of, or against the firm, varying each month. And directions will be given to the man who is responsible for arranging terms of payment, that at times of surplus, accounts should be paid in cash in order to take advantage of discounts; and at periods of the reverse condition, terms must be arranged with the supply houses to stretch credit for as long a period as possible.

If "payments in" are in the form of bills receivable from firms of standing and repute, then it is, of course, possible and normal to discount these with a bank, and so get cash in hand when needed. But not all firms are able to conduct their trading on the basis of accepted bills of payment; they have to rely on customers paying accounts at the due date without any formal written promise to do so; and it is in this type of business where it is so essential to look ahead and get, at certain seasons, the longest possible credit terms from the supply houses,

even though it means paying more to the supply houses for that accommodation.

Not only has this kind of finance estimate to be prepared for a year ahead in general terms, but also it should be an important duty of the head of the counting-house to watch it closely from week to week, so as to adjust the detailed financing to conditions as they arise, and not to let the firm run into a "tight corner" where desperate financial devices must be resorted to.

Of course, with a large and old-established firm—holding big reserves of its own, and, in addition, possessing abundant credit with banks and supply houses—it is far easier to avoid dangerous corners than in the case of a small business, which has to run inside a narrow margin of safety, and is more liable to be upset by a sudden adverse squall.

### Looking Ahead.

The main point is *looking ahead*—putting down on paper the inevitable out-goings of the next few months—allowing a liberal margin for unseen contingencies in expenditures, and being highly conservative in estimates of sales. Where it is clearly shown by the figures that in so-many months' time there will arise a point when extra working capital *must* be secured, then the approach to the bank should be made there and then, in the form of a statement to the bank manager that a loan of so-much is likely to be needed in so-many months' time. The average bank manager, being by nature and training of a prudent and far-seeing habit of mind, appreciates those qualities in his customers, and will think more highly of the man who approaches the question of a loan well in advance of actual requirements.

A bank manager will then inform him as to what form of security will be necessary for this loan. And if such a loan cannot be made by the bank, at all events the business man will know it in good time, and will have warning in advance of the urgent necessity for adjusting his business policy and cutting expenditures, so as to be able to round the difficult corner.

It is looking ahead of this character which reduces the burden of worry on the business man's shoulders, and enables him to keep his mind clear for the constructive development of his business. Very few men can do good work when they are carrying a load of financial worry. The man himself suffers; and his business suffers.

The above line of thought will help to avoid difficult corners in financing, but will never completely provide against the unforeseen contingencies which bring about a financial emergency. Therefore, every business man ought to have well in mind the various possible methods of stretching out his credit and cash in time of desperate emergency.

## CHAPTER V

## HOW TO MEET FINANCIAL EMERGENCIES

1. *The very first resort is tightening up "collections"—endeavouring to get in money which is owing to the firm faster than it would normally come in.*

At the time of the last general slump, all firms were concentrating their endeavours on this, with the natural result that the debtors became pulled in too many directions; but where it is a case of an *individual* business meeting a special emergency of its own, then the plan of action is more likely to be successful, because the debtors to the firm will not be overwhelmed with requests from all directions to pay up promptly or in advance of the natural time for payment.

### Cutting Down Credit Terms.

A manufacturing or wholesale business will at once cut down its terms of credit to customers, and print its notice of shorter terms prominently throughout its selling literature and invoices. It will impress strongly on its travellers that their first endeavour must be to collect old accounts, rather than open new ones. Its usual set of routine collection letters, or statements with coloured slips attached, will be replaced by an entirely fresh set of letters, much more urgent in tone and sent out at shorter intervals than before. Every endeavour will be made to induce customers to pay cash and take discounts; and to obtain prompt payment at due date from those customers who are "perfectly good for the money," but habitually outrun their dates of payment.

Where it is not possible to get a debtor to offer his own written promise to pay on such a date, then the drastic course of drawing a bill on him for the amount, and sending him the bill for his acceptance, may have to be resorted to.

There is a treble advantage in turning accounts due into the form of bills receivable—one point being that it ties down the debtor to a promise to pay at a certain date; the second being that the bill is presented to him for payment at the due date by a bank instead of by the firm; and the third being that such a bill is a negotiable document on which cash can, in most cases, be raised by discounting with a bank or bill broker.

### Collection Letters.

In the case of a retail business dealing direct with the public, drawing a bill on a customer is naturally out of the question, because the public never sign such documents, and would be highly offended at the suggestion that they should do so. The trader has to rely on direct methods, especially the strengthening of his collection letters, and

even, in desperate cases, by personal calls on those who owe him money, and the employment of solicitors and debt-collecting specialists.

The writing of strong and psychological letters to debtors is a whole subject in itself, and an important one for any business. It is dealt with in detail in Chapter IX under the heading of "The Writing of Good Collection Letters."

## Attitude of Creditors.

2. *When all possible methods of getting in money from debtors have been thoroughly exploited, the next recourse is to stave off the firm's creditors.*

Now, the attitude of experienced business men towards the trader who is in difficulties is this: They have money tied up in his business in the form of goods or raw materials which have been sold to him. They do not want these goods back—in most cases they could not get them back even if they wanted to, because the goods have been re-sold, or the raw material has been converted into finished articles. Nor do they want his business to go into the hands of a receiver, because a "going concern" has a value much higher than a "dead concern." If the furniture, fixtures, plant and machinery, and goods of the latter are put to auction, they are not likely to realize more than 50 per cent of their "active value"—and possibly a good deal less.

The reason for this is simple. Suppose it is the stock of a footwear retailer. His stock will consist of all kinds of boots and shoes, of various shapes and sizes and patterns, and probably different quantities in almost every line.

In this condition they are not a fully-balanced stock. They constitute a "job lot." In order to dispose of them, they will have to be sold to a big departmental store, where they will be added to the existing stock, or, more probably, sold off at a "bargain sale"—and the departmental store will not pay more for them than 50 per cent to 60 per cent of their normal cost price to the trade. Similarly, the furniture and fixtures may be such as would be of very little value to anyone else.

In the case of a manufacturer being "sold up," his plant and machinery may be very difficult to dispose of in their second-hand condition.

Knowing this perfectly well, manufacturing and wholesale houses are never anxious to place their trading debtors in the hands of a receiver. They want the debtor to continue his business as a "going concern," and to work his hardest to make some sort of profit out of it, and so be in a position eventually to repay them. What they want from the debtor is a frank statement of why his business has got into this tight corner; a feeling of confidence that he will work his hardest to put things right, if only he is allowed a certain latitude in paying his accounts; and promissory notes or some form of written promises to pay his debts in portions at such-and-such intervals of time.

The above fairly represents the attitude of an experienced business man who is the creditor of a firm in difficulties. And by realizing that attitude, the debtor in a tight corner can put up to his trade creditors a proposition which is likely to be acceptable to them.

## Debtor's Attitude.

If he is in an attitude of mind of wanting to "throw up the sponge" and rid himself entirely of his business worries, then he must not expect any sympathy or mercy from his creditors. But if he has a real determination to keep up his business as a going concern, and personally work as hard as possible to lift it over the line of loss, he will be able to convey that attitude of mind to his creditors, and can definitely expect a *sympathetic response* from them.

His offer may be in the form of part payments in three, six, or nine months' time. Preferably, he should make the same offer to all his heavy creditors, so that they may all feel that the risk is being fairly divided amongst them, and that one creditor is not being unduly favoured as against another.

## Obtaining Fresh Stock.

3. *While the above may stave off the payment of money for goods which have already been supplied and re-sold, yet it does not get over the question of obtaining fresh stock wherewith to* CONTINUE *trading.*

Obviously, a man in this position cannot go to other wholesale or supply houses with any reasonable hope of getting goods on credit, because such firms are sure to ask for trade references, and will learn from his other creditors that he is already in difficulties—which means that they will not supply him.

When enlisting the sympathetic co-operation of his creditors in the matter of extending terms of payment, he should at the same time point out to them that these payments will naturally be dependent on his *continuing the business*, and that, in order to do so, he needs goods to sell (or raw material to convert) as well as accommodation on past owings. In such cases, the manufacturer or wholesale houses may be inclined to let him have a reasonable quantity of goods "on consignment," with a lien over them until they are actually sold. In the case of a complete "failure," they may be able to re-possess such portion of the goods as have not gone out to the consumer.

Generally speaking, the credit manager would be fully alive to the business reasonableness of the request, and provided he were satisfied of the essential honesty and hard-workingness of the applicant, and were also allowed to have a hand in determining the main policy of the business for some time ahead, he would probably allow himself to take the further risk involved.

*By permission* *Geo. Ward*

A Boot and Shoe Factory

### Accepting Bills.

4. *Another way of staving off payments—in this case to a few big creditors rather than to a whole list of creditors—is to offer to accept bills payable in two or three months' time.*

As stated before, such bills are a pooling of the joint credit of debtor and creditor, and are mostly negotiable for cash with a bank, under discount. The debtor will naturally agree to reimburse the creditor for the amount of discount deducted by the bank.

### Accommodation Bills.

Here is a timely moment to mention that banks draw a sharp distinction between bills which pass in a legitimate commercial transaction and another kind, which are known as "Accommodation Bills." The latter are promises to pay drawn up between friends or business associates, which do not rest on a sale of goods or services, and are founded merely on a desire to help out a friend in difficulties, by the pooling of their joint credits. This device is sometimes attempted, but rarely passes the scrutiny of an experienced bank manager. He is not allowed by his headquarters to recommend a loan on an accommodation bill. And therefore he is particularly keen to detect if any such be offered to him.

The accommodation bill is more generally offered with a chance of success to a moneylender, who demands a very high interest rate to make up for the risk of loss he knows he is running.

### Mortgageable Assets.

5. *Sometimes a business firm may have a "mortgageable asset" which they are unaware of—the kind which can only be seen by someone outside the business.*

For instance, the location of a shop may be so desirable that other firms have their eye on it, though they do not care to make an offer for it, because that would at once jerk up its price. In particular, the multiple shop concerns lay their plans many years ahead for the acquiring of suitable sites for their new branch shops; and in a special case might be ready to take on the remainder of a lease at a premium, while the present occupant moves himself to some other site. Or they might be prepared to lend money on a "mortgage of the lease," i.e. to receive the lease if the debtor fails to refund the loan.

There are known cases where a firm has obtained a good premium for its location, and has moved to another street, without much loss of trade, carrying most of its old customers with it—and having in hand as working capital the premium it has secured.

The site may not only be valuable to someone in the same trade, but possibly in some entirely different line of commerce. It might even be suitable for a bank or insurance company.

Again, the patents or trade-marks possessed by a manufacturing firm may be coveted by some other manufacturer, although the latter has never directly made an offer for them or expressed a desire to acquire them. If this manufacturer exists and can be found, he would possibly be ready to advance money on the "security" of these patents or trade-marks being turned over to him, should the debtor fail to pay back the loan.

The many insurances carried by a manufacturing business, and the insurances carried by friendly businesses, gathered together into a bunch, are a "mortgageable asset" in the sense that a rival insurance company would very much like to have that group of insurances. Mortgages on property which have been turned down by a bank have, in some cases, been accepted by an insurance society when a sufficiently large amount of insurance was switched over to them from competing companies at the same time as the loan was granted.

### Raw Material.

6. *Raw material in course of conversion to finished goods is not an asset which would be favourably regarded by a bank. Yet it* IS *an asset, and is possibly mortgageable.*

Cases have occurred where a manufacturer in difficulties has succeeded in getting a loan from another manufacturer or wholesale house on the general security of the material passing through his works, together with the finished articles being turned out.

### Sales Schemes.

7. *A much more usual method of rounding a tight corner is to evolve a Sales Scheme which will get rid of large batches of goods* QUICKLY, *even if at a sacrifice.*

It has often been proved that the public will take goods at a reduction considerably less than a trader would give for a "job stock."

Of sales schemes and selling plans the variety is infinite. There is only one basis—the "bargain"—but any number of ways in which to present that bargain offer to the consumer. Many a trader has managed to save himself at a critical moment by very hard thinking which has resulted in the creation of an ingenious selling scheme.

The subject is dealt with in considerable detail in Chapter VIII under the title of "Special Selling Plans for the Retailer."

## CHAPTER VI

## SOUND BALANCE SHEETS

THERE are many business men who are thoroughly familiar with detailed methods of book-keeping, but do not altogether realize how to "read a

Balance Sheet." And unfortunately, the majority of the treatises on book-keeping, which are very numerous, fail to deal adequately with this vital subject. They are much more concerned with the fitting together of the items which go into the various "books," than in giving a broad survey of the ultimate result as shown on an Annual Balance Sheet—what it should look like in order to appeal favourably to a banker or anyone else who is asked to lend working capital to a business. Looking at the matter broadly from the point of view of finance rather than book-keeping, here are the relationship of the main items on the Liabilities side and the Assets side—

## Issued Capital and Mortgages.

| *Liabilities.* | *Assets.* |
|---|---|
| 1. ISSUED CAPITAL and MORTGAGES should be protected by | Value of FREEHOLD LAND, BUILDINGS, PREMISES, FIXTURES and FITTINGS, PLANT and MACHINERY, etc., after providing properly for Depreciation. |

That is to say, the total face value of the shares issued (in the case of a limited company), or the money put into the business by the owner and his working partners or sleeping partners (in the case of a private firm), should be covered by a conservative valuation of the Fixed Assets mentioned above, after a due amount has been written off them for depreciation. This is the first item that a financial man looks at—as to how far this liability is balanced by the Assets mentioned.

## Reserves.

| *Liabilities.* | *Assets.* |
|---|---|
| 2. RESERVE should be protected by | INVESTMENTS. |

Naturally, the investments, if in Government Stock, will be valued at their market price at the date of the Balance Sheet, or, if they are in the form of more speculative investments, then an appropriate allowance will be made for a possible fall in their value. This means that if it were suddenly necessary to make use of the Reserve, it could be obtained in cash out of the investments, by quickly selling them off.

## Sundry Creditors.

| *Liabilities.* | *Assets.* |
|---|---|
| 3. SUNDRY CREDITORS and BILLS PAYABLE should be protected by | SUNDRY DEBTORS and BILLS RECEIVABLE and STOCK-IN-TRADE together with CASH IN HAND and CASH AT BANK. |

The whole of the latter assets should, of course, more than cover the whole of this third liability; and in a healthy business, amounts from Sundry Debtors and Bills Receivable will be considerably less than the amounts to Sundry Creditors and Bills Payable. In other words, it is better to owe money than be owed, provided that the business in general has liquid assets sufficient to meet its current debts.

## Dividends, Etc.

| *Liabilities.* | *Assets.* |
|---|---|
| 4. DIVIDENDS TO SHAREHOLDERS or PAYMENTS TO PARTNERS should come within the BALANCE OF PROFIT AND LOSS ACCOUNT. | |

It is illegal to pay dividends which have not been *earned* in the current year of trading, unless money is taken out of Reserve to meet them, i.e., they are paid out of the *earnings* of past years. And similarly, payments to partners of the business throughout the year—their Drawing Accounts—should, in a healthy business, be within the balance of the Profit and Loss Account, i.e. the money actually *earned* by the business during the year.

## Goodwill.

| *Liabilities.* | *Assets.* |
|---|---|
| 5. | GOODWILL should be written down to NIL. |

Goodwill is such an uncertain feature, and is so often over-valued by the proprietor of a business, that trained financial men are very sceptical on the subject. They like to see it written down to *nil*, and thereby treated as a "Hidden Reserve" which may be called upon in times of urgent necessity.

The above is the skeleton of a sound Balance Sheet, whether it be that of a small private firm or of a large company with a million pounds capital. The general principles are the same. Liabilities 1, 2, and 3 should have adequate protection in Assets 1, 2, and 3. The owners and partners of the business should not be paid salaries which have not been legitimately earned—and more. The item of Goodwill, which is so frequently "written up" in order to make the assets side balance technically with the liabilities, should be a nominal figure or preferably valued at *nil*.

If the Annual Balance Sheet of a business does not conform to the above general reading, then it is a danger signal to any experienced financial man; and it means that if extra capital has to be secured to keep the business going, it will not be obtained from level-headed men accustomed to reading Balance Sheets.

CHAPTER VII

## HOW TO READ THE MONEY MARKET AND APPLY ITS INDICATIONS TO ORDINARY BUSINESS

By the "money market" is meant the daily quotations given in the newspapers for the Bank Rate, the Discount Rate on Commercial Bills, and the Foreign Exchange Rates on important centres such as New York, Montreal, Paris, Berlin, Amsterdam, etc.

There is, regrettably, a class of "newspaper optimist" who persists in telling his readers that it is a sign of reviving trade when the Bank Rate is going up, and also when the Bank Rate is going down; and when the New York Exchange Rate is going up, and also when it is going down—thereby tending to produce a most hazy public opinion as to what these movements really portend in terms of plain, everyday business.

It would require a very long article to explain adequately the complex workings of the money market; but it may perhaps be helpful to summarize briefly the real meaning of these movements.

### The Bank Rate.

This is fixed from time to time by the Bank of England, and is fundamentally dependent on how much money traders can profitably use in extending their businesses and financing their purchases. When business is in a boom period, the Bank Rate goes up and keeps on going up, until it reaches a culminating point when business has become over-inflated and a slump is about to occur.

After a slump, the Bank Rate goes down, and keeps on going down, until the bottom of the trading depression has been reached. Things have not "touched bottom" until the Bank Rate begins to move up again. In England, it has, within the memories of those who have seen several boom times and slumps, been as high as 10 per cent and as low as 2 per cent.

### The Discount Rate.

While the Bank Rate is a kind of general financial barometer—and governs the regulation charges for loans made by banks (1 per cent above Bank Rate) and the amount of interest allowed by banks for money-on-deposit (1 per cent below Bank Rate, usually), yet the actual rate of discounting commercial paper is "made" by the bill brokers and finance houses daily, according to the supply and demand for loanable money, and is lower than the Bank Rate. It varies with the Bank Rate, but may be only slightly under it or considerably under it. It has been as low as ¾ per cent inside the last thirty years.

A low Discount Rate has the same general indications for business as a low Bank Rate, i.e. it means that trade is poor. And trade in general will not be really on the up-grade until there are indications of it in an advancing Discount Rate.

"Cheap money," a phrase often used by newspaper writers in the sense of an encouraging sign, really means that loanable money from the big banks and finance houses has to be offered at a low rate of interest, because most traders cannot see their way to use it profitably for the financing of business risks. Or else it means that their businesses are in such bad shape that they cannot give adequate securities for fresh loans. "Cheap money" is an unfailing indication of bad times in trade.

### London-New York Exchange Rate.

As it gets nearer to the pre-war "par value" of 4·87 dollars to the £1 sterling, it means that the credit of Great Britain in general is becoming stronger, and that our total exports—including the "invisible exports" of shipping services, banking services, and insurance, as well as the "visible exports" of actual goods—are outweighing the imports. This is, of course, a very healthy sign for British people in general.

On the other hand, when the Exchange Rate is falling, so that the £1 sterling is worth fewer and fewer dollars and cents, it means that the total imports are exceeding the total exports, or else that we are finding difficulty in financing the payments of heavy interest on our debts to the United States. This is a bad sign for British people in general.

It should be borne in mind that the New York-London Exchange Rate has a marked seasonal fluctuation in the latter half of the year, owing to the financing of the cotton and grain buyings from the United States to Great Britain and to Europe in general. This seasonal fluctuation sends the Exchange Rate down temporarily, unless it should be counterbalanced by such an unusual circumstance as a big coal strike in the United States, which would mean that we were exporting an exceptionally large quantity of coal to America, far above the normal.

### London-Montreal Exchange Rate.

This goes up and down with the London-New York Exchange Rate, but not exactly evenly. After the war, it was as much as 10 per cent lower; then it began to creep up until it reached the same level; and it has even gone *above* the London-New York Rate. The latter is a very healthy sign for the state of Canada in general—and, therefore, indirectly for the people of Great Britain.

Exchange Rates of this character are not "artificial." They are not caused by manipulations of "money kings" to any extent. They are

a very real barometer of the workings of the natural laws of supply and demand, and of the economic strength or economic weakness of a country. They *mean something* to anyone who looks at trading conditions in their broadest aspect, in order to apply their indications to his own particular business—to read the signs of when he should begin to make plans for business extension and reaching out for fresh trade; or, on the other hand, to "reef sails" and prepare for stormy weather.

## Exchange Rates of Our European Allies.

When these go down—this phrase always being used in the sense of being adverse to the country whose currency is spoken of—it is an unhealthy sign for that country, and means that its economic state is getting worse.

From our own point of view, it means that they are less able to buy goods from us; and also that the prospect of their paying their war debts to Great Britain becomes more and more remote.

## Exchange Rates of Neutral European Countries.

When these go down, it means that these countries are not in a good economic state, and cannot buy goods from us so readily. But the question of their being able to repay debts to us does not arise, because their Government owings are not war debts. These debts are in most cases adequately covered by their revenues and their fixed assets.

## Exchange Rates of Central European Countries.

When these go down, it means that these countries are getting nearer and nearer to a financial crash—which is not only an unhealthy sign for them, but also for ourselves, because modern industry has become international in character, and no one country can support a vast population without selling to and buying from many other countries.

The depreciation of the Central European currencies goes hand-in-hand with the printing of fresh paper money, not backed by gold. Every time fresh money is turned out by the printing presses, it automatically depreciates the value of the existing paper money—and, sooner or later, the general value of that paper money will fall.

Many people have lost heavily from thinking that roubles, or krone, or marks, or lei were "cheap" at such-and-such a price, and should be bought. Paper money which is being continuously turned out by the printing press is *never* "cheap" in the broad sense of the term.

The natural end of such paper money has been proved in history again and again—and anyone interested in the subject should certainly study the fate of the French paper money called "Assignats," which ultimately became *worthless*, although France itself recovered under a revised system of metallic currency.

## The Barometer of Trading Conditions.

The indications of the money market and the foreign exchange market are the barometer of trading conditions in general. They may not apply directly at the exact present moment to every individual business man; but, sooner or later, they will affect his line of trade, directly or indirectly, and eventually affect *himself*.

If general indications are that the whole country is likely to become more prosperous, then the spending power of the public will increase, an era of freer spending will set in, and this will be of benefit to the majority of businesses in all sorts of lines.

If the general indications are in the contrary direction, it will mean a poorer Great Britain in general, less spending power on the part of the public, more enforced economy, and a more crushing burden of taxation—therefore, pinched conditions for the business man in general, and for the majority of *individual* business men.

The money market barometer provides a further line of business indications. It not only points to coming conditions in trade, but also to the general value of investments in gilt-edged securities and investments in ordinary shares of industrial companies. Without going into the subject in detail, a general summary is—

A falling Bank Rate forecasts a rise in gilt-edged securities. A rising Bank Rate is the forerunner of a fall in gilt-edged securities.

On the other hand, a falling Bank Rate, reflecting business depression, means also lower dividends on ordinary shares of industrial companies, and is therefore bad for the holder of industrial ordinary shares. A rising Bank Rate means rising business prosperity, increased earnings of industrial companies, larger dividends on ordinary shares, and, therefore, increasing market prices for these shares.

The above is the trend of things in general terms. It may not exactly coincide in point of time, i.e. the movement may "lag behind" for a couple of months—but it has a practical application to the business man in two ways: When he is considering the investment of the reserve money of his firm, and also when he is investing his private money.

It is therefore thoroughly worth while, for any man who wants to look ahead in business, to take a glance at the money market quotations, say, once a week or so, and thus keep himself in touch with the indications of the big currents of commerce.

CHAPTER VIII

## SPECIAL SELLING PLANS FOR THE RETAILER

In every retail business there comes a time when goods are moving too slowly and finances are uncomfortably "tight." It becomes necessary to get in cash quickly, and the obvious way to do it is to offer certain lines at a reduction which will create extra and immediate trade.

The basis of any such offer is "the bargain." A bargain, properly presented, has an everlasting appeal to the public—to the man as well as the woman. It is not only the woman who is attracted; plenty of men will succumb to the same lure when the articles are men's goods, and will buy things they do not immediately need, under the influence of the idea of getting something for less money than they can buy it elsewhere.

The bargain has a universal appeal, but its *effectiveness and resultfulness will depend to a great degree on the presentation.*

### General Methods of Presenting a Bargain.

All forms of selling literature used in this connection—whether it be press advertisements, or folders, or handbills, or window-posters, or price tickets—succeed best when they are built in the following way—

*Size.*—Big and bold.

The Old Factory of Messrs. Rowntree & Co., Ltd.
Purchased in 1864 and used until 1908

*Types.*—Heavy and bold for the display matter, contrasting strongly with light-faced types for most of the body matter.

*Colours.*—Bright red and bright yellow are associated in the public mind with bargains. One cannot get far away from bright red and black, or bright yellow and black, for a bargain appeal.

*Paper used in Folders and Circulars.*—This should deliberately be cheap paper. Even the largest and wealthiest departmental stores use cheap paper in connection with bargain sales or bargain offers. The reason is that, if good quality paper were used, the public would immediately get the impression that a lot of money was being spent on the

advertising, and therefore the goods could not really be so cheap as represented to be.

The effect of using cheap paper is to convey the impression of spending as little as possible on advertising expenses, and therefore of being able to make very large reductions in the prices of the goods.

*Crowding of Matter.*—On the same psychological principle, the shrewdest departmental stores deliberately crowd together the pictures and talk and prices of the various articles, in order to produce the same mental atmosphere as the crowded counters of a store during sale-time. Some stores deliberately narrow their aisles at such a time, or place counters right in the middle of the aisles, with the idea of congesting shoppers and producing an appearance of a hectic crowd, even when the actual number of shoppers is not very large.

In the same way, they "crowd the aisles" of their advertising matter, by packing the pictures and wording very close together.

*Window Display.*—The crowding of windows is done with the same idea. Some houses, on "Remnant Day" of a sale, pile a window chock-a-block with remnants thrown in at random, in order to give the suggestions of: "We don't care how we sacrifice these goods. Hurry up, and pick out the best bargains before other people get them!"

All the above general principles are used by stores of the highest reputation, when they have bargain offers to make. And the same principles can well be followed by a smaller retail house.

## Different Ways of Offering Bargains.

Assume that a sale of goods is to last over a whole fortnight. If the same method of offering the bargains be used all through that fortnight, it will lose its freshness and its attractiveness.

Is it possible to present the same thing in a different form almost every day? It certainly *is* possible. And for an illustration, here is a brief synopsis of the daily selling plan for a certain departmental store in the staging of a special 10-day effort to liquidate stocks and get in cash—

An Aerial View of the Present Works of Messrs. Rowntree & Co., Ltd., York

1st Day (Thursday)—The Opening of our Great Sale. Come and pick the best of the bargains—the big strawberries from the top of the basket.

2nd Day (Friday)—Friday has *always* been a special bargain day with this store. But *this* Friday we are surpassing our reputation.

3rd Day (Saturday)—"5/– Day." Everything priced at 5/– is displayed right in the foreground.

4th Day (Monday)—"Fireworks Day." A big offering of goods at the uniform price of 3/11½d.

5th Day (Tuesday)—"Hourly Sales." The business time of the store is divided into 10 separate hours, from 9 o'clock in the morning to 7 o'clock at night; and different lots of bargain goods are offered during each hour of the day.

6th Day (Wednesday)—"Half-Price" Day. All goods are obtainable at half the price marked on the tickets.

7th Day (Thursday)—A continuation of "Half-Price Day," with "Coupons" thrown in as well.

8th Day (Friday)—Again a Friday, therefore " Remnant Day."

9th Day (Saturday)—" 6d. Day." All articles shown are priced at 6d. Even expensive articles are made to come within this category, by being offered at one for the usual price, and an extra one for 6d.

It will be obvious that the above procedure gives daily freshness to the offerings of the various goods, and makes it almost seem as if there were entirely different bargains on offer each day.

Naturally, it meant a good deal of trouble in preparing the store every evening for the next day's sale, and dressing up things afresh, but the results thoroughly warranted all the trouble that was taken.

The thought of the above can be adapted and utilized in many ways by retailers who want to give the best possible chance to their bargain offers.

## " Advance Information."

When a sale of any kind is staged, it will always bring good business to notify the *regular customers* of the shop, and allow them a certain amount of preferential buying.

Here is the way in which a well-known London departmental store handles the thought in a circular letter—

*It is our belief that you have always appreciated advance information concerning our periodical Sales.*

*As an economic proposition, it is desirable to take every advantage of any special buying opportunity which presents itself.*

*Price reductions in regular lines of fine gauge reliable Silk Hose, such as those indicated on the attached list, are being made in the Semi-Annual Hosiery Sale which begins on Monday next.*

*This merchandise will be available for a private view on Friday and Saturday of this week—if you would like to see and reserve any of the goods before they are publicly advertised.*

*P.S.—The mother who has also the children to consider will find a full range of Children's Socks at sale prices which are equally attractive.*

The wording of this letter is purposely of a dignified and " holding back " nature, in order to give point to the *value* of such preferential treatment to regular customers. It says between the lines : " This is an opportunity. We don't mind if *you* fail to take advantage of it, because plenty of other people will not let the opportunity slip."

## The Lure of " Something Free."

There is a deep-rooted instinct in human nature to try and get something for nothing, and although everybody knows in their heart of hearts that nothing worth while is ever obtained without paying for it, yet the suggestion of something " free " will draw people again and again.

A " free offer " can take many different forms. One basic way is to pile a window (or advertisement) with a heap of the articles which are to be given away—on condition that the purchaser buys other goods to the amount of so-much.

This method has been used for untold years by men who sell goods in market places or at street corners. If they have, say, a cheap shaving outfit to sell, they offer the razor " free "—on condition that the purchaser buys a shaving brush and stick of soap for so-much.

This method makes an everlasting appeal to men and women, and has been utilized at times by many dignified stores and shops, when urgently in need of liquidating stock and getting in cash.

## The " Free Trial," or " Goods on Approval."

Many very high-grade office and business and household machines are sold on this plan. In the case of a certain very excellent office machine, it has been found in practice that it can *only* be sold by putting it into a man's office for a fortnight's free trial.

Adapting the same idea to the retailer, it is sometimes possible to offer to send a selection of goods on approval, without cash in advance—and thereby " bring the shop to the customer."

Developing this idea still further, a sports goods retailer, situated away from the centre of his town, and not in contact with the best class of prospects, managed to build up a very extensive business by putting samples of his goods into the hands of the very men he wanted to reach, in the following ingenious way.

A circular letter was sent to the members of the local golf clubs, reading—

*We are sending you under separate cover a sample of the Blank golf ball, with your name on it.*

*Will you please give this ball a good testing, because we believe it will meet your particular requirements ? We should value your opinion of the ball.*

*The price is . . . . . per dozen. We are keeping your name-plate here, without cost to you, and shall be pleased to mark all your balls as a part of our service.*

The selling of the golf balls was, of course, an opening wedge to the securing of trade in other lines of sports goods.

Cigars and cigarettes have been sold successfully for years on the general principle of : " Send no money. Have a box on approval. Smoke a few out of the box. If you like them, remit for the box. But if you don't like them, return the rest of the box to us—and there the transaction will end, without any obligation whatever on your part."

It is very important, in such a form of offer, to stress the " no obligation " part. Most people

strongly dislike the idea of being under any sort of obligation to buy goods sent to them on approval—any more than they feel obligated to buy goods brought out and displayed to them over the counter of a shop.

If one is endeavouring to "bring the shop to the customer," then the thought must be carried to its logical conclusion.

## The "Time Limit."

If any person believes that a special offer of goods will be continued indefinitely—that the same goods offered this month can be bought at the same price next month, or the month after—then this will be an instant signal to the sub-conscious mind to delay purchasing.

It is human nature to *not*-act in that way.

Consequently, it is strongly advisable to tie down a bargain offer in one of two basic ways—

1. *This offer remains good for only* 14 *days.*

Or—

2. *This offer is available only* while the goods last. *They may all be sold in a fortnight from now. They may not last out more than a week. We don't know how long the stock will last. But we do know that once the stock is exhausted, it will be impossible to offer similar goods at anywhere near this special bargain price.*

Either of the above is an urge to action—a spur to hurry-up-and-buy-now. And in practically every form of bargain offer, wording of the one kind or the other must be included—distinctly and prominently.

## "Slack Season" Selling.

There are times in every retail business when trade is "seasonally" slack—August, the height of the holiday exodus, for a city shop; February and March for men's tailoring; and so on.

This fact can be and has been used in attracting trade. For instance, a men's tailor circularizes as follows—

*You may not know that the month of March is a very slack month with us.*

*The reason is that most gentlemen defer ordering their Spring suits until April, or until May. In those two months we get more orders than we can cope with.*

*At the present moment our workpeople have little to do, and our overhead expenses run on just the same as in the busy months. So, in order to have our workpeople busier now, and not so over-worked in April and May, we are offering a* Special Discount of 5% on all suits and Spring overcoats ordered during the next fortnight.

*Our full range of Spring patterns is now in. You have just the same selection as you wil have a month later.*

*But, by placing your order now, you will save* 5% *on the cost of your Spring clothing.*

## "Vouchers" or "Cash Warrants."

In order to *visualize* a special discount or rebate, so that the prospect can see it vividly, it is often a sound plan to accompany a special offer by a "voucher" or "cash warrant" pinned right in front of the circular letter.

A toy shop sent out a letter on 1st November to try to get a good share of the Christmas toy trade well in advance of its competitors. This letter had a voucher pinned to the front of it, drawn up somewhat on the lines of a cheque, offering "5% discount on all toys bought during the month of November."

A "Cash Warrant," visualizing a rebate of 5s. on a 30s. article, has often proved very successful in getting the prospect to realize the cash value to himself of the bargain offer. There it is in black-and-white in front of him—a document of the face value of 5s., which will be taken as 5s. towards the full price of 30s. by the shop which issued it.

Many people need to have a price reduction hammered into them in such an emphatic way—then, having become convinced by it, they act and buy.

## "Coupons" and "Premiums."

This is a method of inducing a number of purchases from the same shop. Its form can be varied in scores of ways, but the principle is always the same—to put into the customer's hand a piece of paper representing a value of so-much towards the goal of a *free* article.

The force of the coupon is that the customer *feels he owns part of the desired free gift* the moment he (or she) has the coupon in his pocket—and that it would be waste of good money not to go on buying from the same shop, and so accumulating enough coupons to win the prize.

Even well-to-do people will treasure up coupons.

## "Living" or "Moving" Figures.

Exhibiting a piece of mechanism in motion in a shop window—or, better still, a man or girl actually working it—has very often proved effective in drawing a crowd to that window.

But, drawing a crowd outside does not necessarily mean that they will come inside—and come inside with a desire to buy.

If any such "show" is staged in the window, it ought to be built around some central idea for exciting not only interest, but also an urge-to-possess in the mind of those who see the exhibition. This is highly important.

Many such window shows have been failures in practice, because it was thought sufficient to have a pretty girl in the window doing something or other. The attention of the onlookers become centred on the pretty girl, and not on what she is demonstrating. The demonstration must be *foremost*—and it has to be so arranged that it will

cause people who see it to want to buy the article or process which is being demonstrated.

As an instance, "Invisible Repairs" shops have advertised themselves excellently by having women in the window working on the extraordinarily fine work of putting "invisible" patches into the actual garments left there by customers.

These women are obviously practical workers—they are not merely "pretty dolls"—and therefore, they draw the attention of the passer-by to their *skill* rather than to their looks.

## "Competitions"—Good and Bad.

Any number of brilliant sales-promotion schemes which depend on a prize competition have been killed by the fact that the competition comes within the scope of the Lottery Act.

The line is hard to define, but it seems to amount to this: "If there is an entrance fee of any kind, by money or purchase of goods, and the element of luck in the competition greatly outweighs the element of skill, then the competition may be summarily stopped by the law."

The elements of a successful prize competition conducted by a retail shop are—

1. Not a lottery.
2. Not needing much specialized skill.
3. Apparently open to "the meanest intelligence."
4. Definitely linked up with the product to be sold.

The last element is vital. If a competition is merely a chance of winning money, then it may in the long run do *actual harm* to the shop. The reason is, the winners will be satisfied, but the losers will be disappointed, and there may be 99 losers, or 999 losers, to every winner.

If, added to their disappointment, the merits of the article have not been deeply impressed upon them, they will promptly forget all about the article, or remember it only in *association with a disappointment*—which must inevitably react against the shop.

As an instance of a competition which linked up strongly with the article to be sold, a certain Pencil Company offered prizes for those who could estimate most exactly the number of miles which could be written by one of their H.B. pencils. That is to say, each competitor was asked to buy a pencil, use up some fraction of an inch of the lead in writing lines with it, and then calculate how far the total amount of lead in the pencil could possibly write.

So, everyone entering for this competition would be using the pencil—and in the process of using it,

*By permission* *Kalamazoo (Sales) Ltd.*

AN UP-TO-DATE WORKS CANTEEN—EXTERIOR

would no doubt be favourably impressed with the quality of the lead, and the advisability of buying it for general use.

The element of skill should not be too specialized. There must be no feeling in the mind of the public that the winner is sure to be somebody with special manual skill or literary ability. The possible winner should be an ordinary person of average skill and intelligence—but with a little more energy and persistence than the others!

Even the losers should have the feeling that they have *gained something*, however slight, in entering for the competition—either in becoming acquainted with a really good article at a moderate price, or else in the interest and pleasure aroused during the attempt at winning.

Some firms go further—they devise a "follow-up" to the competition, offering some small rebate or discount on goods to the *losers*—so that even a loser will feel goodwill towards the firm.

## "Free Samples."

It is always possible to get people into a shop by offering them "free samples" of this or that.

But actual practice has demonstrated that it does not necessarily lead to sales. Indeed, far from it.

Set up a special counter for the giving away of small free samples of, say, soap, and also for the selling of full tablets or bars of that soap—and the probability is that at least 90 people will take a free sample and not buy, to every 10 who actually buy.

Nobody feels under any sense of obligation after receiving a small free sample, because its value is so slight. They *would*, however, feel under a sense of obligation if they were given a whole tablet or bar of soap, asked to use it, and pay for it only if they were fully and thoroughly satisfied after having used it. An offer of this kind would probably result in 90 per cent, or more, paying in full for a soap of good quality and value.

Let us contrast the two methods in terms of shillings and pence. Assume that the full tablet of soap sells at 7½d. and costs the firm 5d. Assume that the small sample tablet has the value of ¼d. Then the profit and loss would work out as follows :

"FREE SAMPLE"—

| | | s. | d. |
|---|---|---|---|
| 90 free samples at loss of ¼d. | Loss of | 1 | 10½ |
| 10 sold at profit of 2½d. | Profit of | 2 | 1 |
| | Profit of | | 2¼ |

"PAY IF SATISFIED"—

| | | s. | d. |
|---|---|---|---|
| 10 not paid for at loss of 5d. | Loss of | 4 | 2 |
| 90 paid for at profit of 2½d. | Profit of | 18 | 9 |
| | Profit of | 14 | 7 |

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AN UP-TO-DATE WORKS CANTEEN—INTERIOR

This would particularly apply to a local shop doing a reasonably good-class trade, where the majority of the people who take the tablets of soap on approval would be known by sight to the retailer. It might not apply so favourably in the case of a central store, where a large number of the shoppers would be strangers.

But, in any case, the method of trusting to the honour of the shopper with an article valued at 6d., or 1s., or 2s., is far preferable to the method of giving that same shopper a free sample valued at ¼d., or ½d., or 1d.

## Cultivating Credit Accounts.

This further type of selling plan applies not to the retail establishment which urgently needs cash, but to the firm which is financially "easy," yet strongly needs a bigger volume of trade.

There is no doubt at all that people who have credit accounts with shops are inclined to buy more freely than if they had to pay cash-on-the-nail. It is so simple to say: "Charge it up." To many people it does not seem like actually spending money.

Naturally, one has to be particular with whom one opens credit accounts—and the best way is to pick one's list of names very carefully, and then extend to them a *personal* invitation.

Here is the wording used by a prominent departmental store—

*A credit account is a* real *convenience.*

*Would you like to have the convenience of a credit account with our store, which specializes in correct fashions for yourself as well as for the children?*

*If you wish, and will notify us on the form enclosed, we will be happy to open a credit account for you, and to supply you with a "credit card" which you can show to any of our assistants when you desire purchases to be charged up to you.*

A large men's shop sends, instead of a letter, a printed invitation with the name of the customer *printed* in the body of the wording—

*This is a personal invitation to*
HENRY J. SMITH, ESQ.,
*to open a credit account with*
BLANK & CO.

*All the arrangements have been made; you need only return the enclosed card to us, and our assistants will be directed to charge up whatever you wish.*

Of course, one has to be sure of the standing of the customer to whom such an invitation is made, and one has to have an efficient collection department in case his payments fall into arrears.

In this connection, the reader is referred to the following Chapter on "The Writing of Good Collection Letters."

CHAPTER IX

# THE WRITING OF GOOD COLLECTION LETTERS

A MAN in the United States wrote a series of five collection letters; tested them in actual practice; revised them in the light of results; tested them again and proved them highly satisfactory; and then offered the set to business firms at the price of £20 to each firm.

Many experienced concerns were willing to pay £20 for the privilege of using the set of letters.

This illustrates the difficulty of devising such letters, and their value when they are found to be real "pullers."

## To what Mainspring of Action can one Appeal?

The difficulty in constructing good collection letters, which will bring in money owing from "slow payers," lies in the fact that it is *against the debtor's self-interest* to pay his debts—or, at least, he sees it that way.

He sees himself pressed for payment in many directions. He sees many of his own customers paying up slowly, and only under pressure. He sees that he needs liquid cash to meet the immediate everyday expenses of his business or his home—salaries and wages, postages, railway charges, food and clothing, and so forth. And, therefore, it is apparently in his own interests to delay paying his creditors for as long as they will stand for it.

This is the typical point of view of the "slow payer," and it must be thoroughly realized before any letter can be written which will move him to payment. He is not dishonest. He is not a "crook." He would prefer to pay his debts on the due dates—if he could do so without inconveniencing or dislocating his business.

At least 90 per cent of men would prefer to pay their debts promptly.

Therefore, it has to be shown to them that they will *gain something*, however slight that really is, by doing so. What can they gain?

## The Customary Procedure of Collections

The "slow payer" will already have received the following notifications of his debt from the creditor—

1. An invoice, at the time of despatch of goods.
2. A statement, about the first of the following month.
3. A second statement, with a coloured "sticker" attached, 10 days or 14 days after the debt falls due for payment.

This is the customary procedure. One assumes in the first place that the debtor is going to pay at the due date. But if he fails to do so, and fails to reply to the second statement within 14 days of receiving it, he comes into the category of the "slow payer," and requires stronger treatment.

## Driving Home the Overdueness of the Debt.

The first step is to convey to him definitely that he has overstepped the time of payment, and that you "have your eye on him."

The intention of this letter is to give him a feeling of *uncomfortableness*. Invoices and statements are such everyday routine affairs that they

convey no such feeling. The letter must strive to make him aware that he is being treated *individually*. The letter will, of course, be courteous in tone, but, nevertheless, it has to make him uncomfortable. If the feeling of uncomfortableness *outweighs* the self-interest of delaying payment, there will be a "motive of action," and he will pay up in order to clear his mind.

That is the "gain" for him.

A wholesale house, collecting from retailers, writes like this—

*Our terms of business, as you know, are net* 30 *days.*

*Your June Account of* £18 4*s.* 3*d. is, therefore,* overdue.

*This has been overlooked by your counting-house, and so we trust you will kindly have a cheque posted to us in the course of the next few days.*

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AN UP-TO-DATE WORKS CANTEEN—THE KITCHEN

A well-known London retail establishment uses this form of letter—

*We desire to call your attention to our account, which is now* overdue.

*Perhaps you will kindly favour us with a settlement in the course of the next few days.*

*Thanking you in anticipation,*

*We are,*

*Etc.*

| | £ | s. | d. | |
|---|---|---|---|---|
| *Amount due—November* | 2 | 3 | 8 | *General* |
| *December* | | 8 | 9 | *Provisions* |
| *Total* | £2 | 12 | 5 | |

It is brief, yet courteous. It is courteous, yet firm.

You will notice that these letters do not make any form of *apology* for drawing attention to the overdue account. That would be weak. It would be "putting the boot on the wrong foot." No creditor need apologize for calling attention, in a courteous manner, to an account which is clearly overdue. It is his right. It is in the contract with his customer. It calls for no kind of apology.

## The Second Follow-Up.

If the above type of letter fails to bring in the money, or an explanation of non-payment from

the customer, then a stronger letter has to be sent to him about 14 days later.

Here is such a letter to the customers of the same retail house—

*We are sorry to find that we have not received payment of our overdue account.*

*Possibly there is an item on the account which you do not agree? And in that case, will you please let us have particulars, so that we can look into it for you.*

*If, however, you have no point to raise, we must ask you to let us have a settlement in the course of the next day or so, as our terms of credit have now been considerably exceeded.*

*Etc.*

| | £ | s. | d. | |
|---|---|---|---|---|
| *Amount due—November* | 2 | 3 | 8 | *General* |
| *December* | | 8 | 9 | *Provisions* |
| *Total* | £2 | 12 | 5 | |

The follow-up from the wholesale house to its retailer customers runs along the same general line of thought—

*Is there any item on your June Account of £18 4s. 3d. which is incorrect?*

*If so, please advise us, and we will have it put right.*

*But if it is quite correct, then we must ask you to settle it without delay. Our terms were clearly stated on the invoice and on the statements—net 30 days—and the credit has been stretched far beyond that.*

*Will you kindly see that this matter gets attention at once?*

## Making it Easy for the Customer to Remit.

The above letters aim to make the debtor feel uncomfortable, and to get him to remove the feeling of uncomfortableness by paying up. That is one form of "gain" for him.

Another "motive of action" is making it *easy* for him to send a remittance. A certain retail house encloses, at this stage of the follow-up, a stamped registered envelope addressed in print to itself, with the explanation—

*Possibly you have delayed remitting to us because it has meant trouble to you in writing a letter to us, writing out a cheque, addressing the envelope, and so on.*

*So we are enclosing, for your convenience, a ready-addressed and registered envelope.*

*You can slip this letter of ours into the envelope, with Treasury notes, postal orders, or stamps to make up an odd amount—and have it handed over the counter at a Post Office.*

*Please do this now—and so clear your mind of the whole matter.*

## Appealing to the Customer's Business Sense.

A further "motive of action" may be found in the customer's sense of his credit and business standing.

Every business man knows that credit is a vital factor in his business. Some men are nervous lest their ability to pay be doubted. And this feeling can sometimes be turned into a "motive of action" for paying up.

As an instance—

*I ought to point out to you that your continued silence in regard to our two statements of Account, and my two further letters of 28th June and 12th July, is producing a very bad impression on my mind.*

*We wholesalers are all ready to assist a customer with extra credit, if he explains to us that he really needs it, and why he needs it. But we are not ready to extend credit to him, if by his own actions he conveys to us an impression of deliberately delaying payment.*

*Perhaps I have misunderstood your silence. There may be personal reasons why you have not been able to answer my letters.*

*If so, please explain—and remove this impression from my mind.*

The above letter is intended to hint that wholesalers exchange credit information about their customers—which they do, in bad cases, through their Mutual Protection Associations—and that if the debtor delays payment any longer, he is likely to meet with an icy reception from any other wholesale house in the same line of trade, and find his credit standing gone.

A letter of that type can be used where it is known (or guessed) that the debtor is that type of man.

## Appealing to His Sense of Honour and Fairness.

A "motive of action" of wider application is the appeal to the debtor's sense of honour and fairness.

Here is a good specimen of a letter with an "I believe in you" appeal. It was addressed to a farmer, hence the blunt and "uncommercial" nature of the wording—

*When we sent you the Blank Machine for a 10 days' free trial at your own place, we did it in the belief that you paid your bills when you had value for money, and were properly treated.*

*When our counting-house man called my attention to the fact that you had not paid for the machine—in spite of our sending two statements and two letters of reminder—I told him there must be something wrong, and I would write to you about it myself.*

*If the machine hasn't been absolutely satisfactory, Mr. Smith, we want to know about it,*

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A Steel Building Lined with Plaster Slabs, used for Wood-working

*of course, because you know we deal on the basis of guaranteeing satisfaction. If it has been satisfactory, I know you will send me your cheque for it by return of post.*

*I am enclosing a stamped addressed envelope for your convenience, which is addressed to me personally, and I will be on the look-out for your letter.*

Here is another letter of the same general type, the appeal to a man's "better nature"—

*I had to make a report to our General Manager showing who owed us money and what for.*

*When he came to your name on the list, and saw how old the account was, he instantly ordered me to get that money, somehow or other. You can easily understand what he meant by "somehow or other."*

*But I stood up for you, and said that I knew you meant to pay all right, but probably you had had some money difficulties lately. And he said: "Just one more try."*

*So here it is—your opportunity to prove I was right in trusting you, and putting me right with our General Manager.*

*Send me your cheque now in this envelope I enclose—and then I can show the General Manager you are a man of your word.*

A further letter of the same kind, addressed to a retailer, appealing to his sense of fairness—

*Have you found us fair and reasonable in our dealings with you? Is there anything we have done, or left undone, which you consider was not fair or reasonable on our part?*

*And if you give us a "clean slate," aren't we entitled to expect the same fair treatment from yourself?*

*We have to meet our own obligations, and we always keep our promises. We have to pay our manufacturers at the due dates, for the very goods we have supplied to you.*

*If you will realize that, I am sure you will make a special effort to get in the money to pay us the long overdue account of March.*

When *can you pay us? Shall we say by the 5th of next month? Isn't that giving you sufficient time to collect from your own customers?*

*And if so, please send us by return your cheque post-dated to the 5th of next month, and let us feel that you are going to make that special effort!*

## Sympathetic Handling.

One can often touch a man who is in difficulties by a sympathetic reference to his troubles. He will then be inclined to pay preferentially a debt to the sympathetic creditor rather than to those who are coldly demanding their money.

Such a letter needs, of course, to be based on knowledge of the man's trouble. And while it should be sympathetic, it should also be firm in its ultimate request. Here is such a letter—

*Our Mr. Jones tells us that you have had a lot of hard luck lately.*

*Your wife's illness—and the local foundry strike upsetting your trade—and the fresh competition from the multiple shop concern.*

*We realize that you must have gone through a very worrying time, and we are sincerely sorry you have had all these troubles coming on you one after another.*

*Can we do anything to help you in the selling of goods, through our showcard and window-ticket service, or in the getting out of circulars to your customers? We will gladly be of help to you in this way—or perhaps you might like us to send a set of collection letters which have proved very successful for getting in overdue accounts in a business similar to yours?*

*We want to help you—but at the same time, as you will realize, we must consider our own difficulties of finance. We cannot go on extending credit to you indefinitely.*

*When can you manage to pay our June account of £32 18s. 6d.? Can you manage to send us (say) £15 now, and the balance at the beginning of next month?*

*We would appreciate this cheque on account straightaway, because it would make us feel that you were co-operating with us, as we are ready to do with you. So please do this to-day.*

## Fear of the Consequences.

When all other methods have failed, one must try to touch the motive of fear—fear of the loss of business prestige or local reputation—fear of loss as compared with the "gain" of keeping that prestige.

This type of letter requires very careful wording, and has to be *fitted* to the individual man. One such letter, from a hire-purchase furniture house, read as follows—

*Would you care to have your furniture taken away in the sight of all your neighbours? Would you like them to think that you had obtained, on the method of deferred payments, more than you could pay for? Would you like them to sum you up as a man of that kind?*

*Stop and consider this.*

*We never want to re-possess furniture, even though we might be making a gain by doing so. It is our policy to sell furniture on the deferred payments system, so that a man and his young wife who cannot furnish a home by paying cash, can yet step right into a fully-furnished home, and enjoy all its comforts, and have their own little nest to themselves, and pay for it bit by bit on easy terms of payment.*

*Many married couples have come and thanked*

*us for helping them to found a happy home—and we appreciate that just as much as the profit which comes to us on the furniture.*

*We definitely do not want to turn anyone out of their home. But we cannot stretch our easy terms of payment any further than we have done in your own case.*

*Please consider whether it isn't well worth a little extra effort at economy to meet our account, and continue to enjoy the comforts of your home and the regard of your neighbours.*

*The enclosed addressed envelope is for your reply. The decision you make will mean a great deal to you.*

## Resort to the Debt Collection Agency and the Law.

Accounts judged "hopeless" are often handed over to specialists in debt collection—especially when the customer lives at a considerable distance away, and it is necessary to tackle him personally at his own address.

The collecting then becomes more a matter of personal dunning of the debtor than of letter-writing.

The last resort in letter-writing is the threat of the law. This should only be resorted to when the man possesses something on which the law can lay hands. It is perfectly easy to obtain a Judgment Summons, but that is far from obtaining money owing. It is merely a legal recognition of the debt being owed. The Court does not secure money owing to you. One has to get it oneself, or by one's agents, acting on such legal rights as are conferred by the judgment of the Court.

Further, a threat of legal action must not be a "bluff." If you threaten it, you must definitely intend to go through with it.

A letter of warning needs to be firm and direct—

*We have written asking you for payment of our account of £36 9s. 6d., on the following dates—*

| | |
|---|---|
| *1st Sept.* | *Statement* |
| *14th Sept.* | ,, |
| *1st Oct.* | *Letter* |
| *14th Oct.* | ,, |
| *24th Oct.* | ,, |
| *1st Nov.* | ,, |

*You have neither paid our account nor queried any item on it; nor have you replied to any of our six statements and letters.*

*You have therefore left us no alternative but to place the matter in the hands of our Solicitor.*

*This will be done if we do not receive your remittance in full within three days of date—and all legal costs incurred by our Solicitor will be an expense which you yourself will have eventually to meet.*

Sometimes it may be considered advisable to paint the legal consequences in colours which will make the debtor realize what lies before him—

*Are you going to force us to take legal means of collecting our small account?*

*Do you realize all that this will mean to you?*

*The case heard in your own County Court. Your name posted as a delinquent debtor. The verdict of the Court published not only in your town, but also in "Stubbs' Gazette," which is read regularly by the manufacturers and wholesalers to whom you look for your supplies. This means that they will never extend you any further credit, even if you move to another part of the country and set up a fresh business.*

*The process of distraining on your possessions under the authority of the Law. Your possessions put up to auction, and fetching only a fraction of what they are really worth.*

*And on top of the total of your account with us, you will have to pay all the legal expenses incurred over the action in the County Court, and the work of realizing your assets. This means at least £ . . . . over and above your account.*

*Please realize all this very clearly before you force us to take legal action. We will wait until the . . . . th for your remittance. Unless it reaches us by then, we will simply place the whole matter in the hands of our Solicitor.*

## Different Types of Debtors.

What has been said above applies very widely to the "slow payer"—the man who is honest, but is prevented by his own personal and business troubles from paying his debts on their due dates.

This is by far the largest class of debtor.

There are, however, other types, which can be broadly classified as—

1. The man who delays payment deliberately, even if he has the cash wherewith to pay, in order to obtain the advantage of interest on the money he withholds.

2. The man who is not basically honest—is superficially honest as a matter of business expediency, but would allow himself to "crook" if he thought he would not be losing thereby.

3. The actual "crook"—the man who sets up a "straw" business, with the idea of making money by wheedling goods out of manufacturers and wholesalers, selling those goods to the public, and keeping the proceeds in his own pocket—without paying what he owes to the manufacturers and wholesalers.

Also there is the class of "crook" who victimizes retailers.

If it is known, or reasonably believed, that a debtor belongs to one or other of these divisions, then, of course, you have to adapt your usual system of collection letters to fit in with the man's special frame of mind.

This means individual letters applying to

individual cases. They cannot be dealt with by routine stock letters.

## The Mean Man.

This type needs to be dealt with very firmly—even curtly. He is not amenable to polite letters, but regards patient politeness as weakness on the part of those to whom he owes the money.

A man of this type can only be appealed to from a "business" standpoint—i.e. an endeavour to show and convince him that his tactics will be a *business disadvantage* to him in the long run. As, for instance—

*You have sent no answer to our letters of the 8th and the 20th, calling attention to your overdue account.*

*This is not good business.*

*Like all other suppliers, we divide our customers into "good payers" or "bad payers"—and if it comes to a time of emergency, when our customers are begging us for special favours in extending credit, we naturally look over our records and decide from past performance whether the customer is entitled to special consideration, or not.*

*Remember what happened at the beginning of the last slump.*

*It is always prudent for a business man to get the reputation of being a "good payer." He may need that reputation some day—and need it badly.*

*We suggest that you put yourselves right with us, by having a cheque for our account posted off to us to-day.*

## The Man who is NOT Fundamentally Honest.

This is an extremely difficult type to deal with. One never knows at what point he will consider dishonesty pays better than honesty. Naturally, one tries to avoid having such accounts on one's books, but it is not always possible to do so. When a case arises, it must be treated specially.

You have to go after this type of man "with a whip." He is only amenable to "fear of consequences."

This being so, the kind of letters most likely to obtain payment from him are letters which will paint in vivid colours the expense and trouble and personal inconvenience and loss of business which will come down upon him if harsher measures have to be resorted to.

This type of case is really better dealt with by personal calls than by letter—because a man of that nature may be much more impressed by a straight look and a determined manner, than by what one may actually say. In a letter, that look and attitude cannot be carried to him so definitely.

## The "Crook."

With the type of man who sets up a "straw" business, letters are useless. They will bring back replies, but the replies will only be specious promises designed to keep the creditor quiet for a time.

The same applies to the customers of retail shops who deliberately obtain goods on credit without intention to pay for them.

Letters rarely touch such people. The only way to get at them is by process of the Law—always assuming that they possess assets which can be seized under one's legal rights. As, for instance, a bank account. The creditor who has a Judgment Summons against a man, can "garnishee" his bank balance, by a letter to the bank manager backed up by the authority of the Court.

This is assuming that the man *has* a bank account. Frequently he has not. And one danger signal, amongst others, is when a man asking for credit cannot or will not give a bank reference.

## The Actual Writing of Collection Letters.

The writing of business letters of any sort designed to produce action—and produce it strongly—is a specialized gift, and a gift which has to be developed by years of practice.

A good collection letter "sells" to a debtor the difficult idea that it will be TO HIS ADVANTAGE to pay up promptly. It is really a form of "selling letter."

Anyone who has the ability to write a good selling letter can write a good collection letter. The one naturally and logically follows the other. If you yourself are writing letters for your firm which produce good business, then you will also be able to write collection letters which will touch a debtor in one of the several ways described above.

But if you are not able to translate thoughts into strong and vivid words, then it is advisable to get help on this difficult matter from someone with specialized experience in the writing of effective business letters.

SECTION 9

# The Principles of Organization

## WHAT IT IS, WHAT DO WE INTEND TO DO? BY WHOM IS IT TO BE DONE? HOW IS IT TO BE DONE? HOW DO WE KNOW THAT THE WORK IS BEING DONE? HOW IS THE ORGANIZATION TO TEST ITSELF?

By JOHN LEE, M.A., M.COM.SC.

### What is Organization?

AT the present moment the word "Organization" is decidedly popular. It has become so largely by reason of a wave of indolence in respect of the precise meaning of words. We like the full, rich word; it is soothing and it seems to take from us "the brow of care," and to solve all our problems. In point of fact "organization" is a very precise word, and it suggests a systematic arrangement which itself must be precise to be effective. We can get an idea of the true meaning by a simple parallel. Let us take a Rugby football match. On one side is the team; each has his position; each has his relation to the other. It is "organized," that is to say the whole of the parts—the members of the team—are so co-ordinated that each part is both an end to itself as regards its own functions and a means to an end as regards the function of the whole team. The ball must be passed from this player to that player; the men must group themselves in a certain order for the scrummage. It does not mean that the importance of each is lost in the consideration of the importance of the whole, but that the importance of each is emphasized in such a way that it may fit in with the emphasized importance of others in the team. Suppose we pick fifteen men at random to oppose such a team. We say to them: "There you are; that is your half of the field; you are stronger, each of you, than the others, each of them; prevent them, therefore, from approaching that goal!" Whatever advantages they may have, they will be beaten by organization. They will not be found where they are wanted. The ball will be passed from player to player and they will be "left standing," as the sporting reporter puts it. They are individuals of merit, but their individual merit has not been fitted into a scheme. They are not organized. Or take an orchestra. We might assemble them together in quite a seemly array, and bid the brass to blow and the strings to sound and the parchment of the drum to throb. The result would frighten us. We must get an expert to draw up a scheme which will indicate to each player what he is to play and when he is to play it. We must provide for centralized leadership. We must encourage each player to be an expert, but he must fit in that expertness with the expertness of others. Then we get harmony. If all the varied instruments are combined in one instrument with highly developed organization, we call it an "organ." Thus, organization sets out to produce a result which no mere accidental assembly of the same components could possibly produce. To organize is to plan, to teach, to encourage, to develop, to combine, and then to judge and to perfect.

But we must be very careful not to over-stress the end, and by that is meant to under-stress the organization of the parts. It is one of the dangers of our time in industry, and it is a special danger in the smaller industries. We can realize this to best purpose by considering the word "organ." We have glanced at one meaning, the highly-developed musical instrument which is organized out of many parts. But if we talk of the human body as an organism, we shall find that the separate parts are often called "organs." The heart and the lungs and the liver are "organs." Similarly, Webster's Dictionary tells us that the cylinder and the valves and the cranks are all "organs" of the steam-engine. This will illustrate for us the fact that organization is not a mere summation, a mere gathering together, of a number of working parts to perform a certain final or consummated operation. The heart must beat, the lungs must breathe, the liver must perform its purifying operations in order that the man may—live! Each function is absolutely necessary to the fullness of the man's life. Each organ (in this sense) is organized to fulfil its own particular mission so that the complete organism may fulfil its own completed mission, and this is not merely the total of all the missions of the separated organs. It includes them, but it adds something to them. A poor sort of man might live his days with his heart beating soundly and his lungs breathing successfully. The complete organization must have some final or purposeful plan far beyond the plan which directs the separate organs. That final or purposeful plan must include

Office of Factory Control Branch, Messrs. Morland & Impey, Ltd.

the relationship of the complete organization to the rest of existence—to God, as the religious would say; to other men, as social enthusiasts would say; to the earning of a living, as the economists would say; to the advancment of science or art or industry, as the scientist or the artist or the industrialist would say. The purpose may be combined, but that does not mean that the organization is confounded or confused or doubtful. As I write this, I am self-organized to that end. If I go in an hour's time to play golf, I shall use the same human machine, freshly organized and directed to another end.

## What Organization Includes.

Thus organization includes (1) the clear perception of purpose; (2) the devising of means to that end and of the best means; (3) the consideration of each part, in order that, being an organism within an organism it shall "function," to use a modern word; that is, perform its duties to the appropriate (maybe limited) end; (4) the proper relation of the purpose to those who are to benefit by the fulfilling of the purpose. Thus, we must beware of such a conception of organization as keeps too stern an eye on the final end, for true organization is really the discovery of an exquisitely fine balance between the encouragement of the separate organs each to perform its own function, and the encouragement of the complete organization to fulfil its ultimate end. We may learn from the man with a cold in his head. He sees everything through grey glasses. He is depressed. He is low in spirit. He is hardly a complete agent for the fulfilment of all his powers until the cold vanishes. Thus we shall find that the central difficulty in the particular aspect of organization which we are about to study lies in the co-ordination of the parts. There are other difficulties. Sometimes there is an insufficiently clear vision of the end; often there is only a partial organization of the relation between the end and those who are to benefit. Sometimes there is insufficiently clear perception of the proper functioning of each individual part; often there is neglect in tuition, in encouragement, in clarity of instruction. Yet it has to be said that, admitting all this, the true weakness in general organization lies between the two. It is a failure to correlate the parts to the whole. An illustration may be found in nearly all industrial processes. It is commonplace to say that production has come to be compounded of multitudinous small parts, and that the workers have to be contented with constant employment at some fine detail, without a chance to realize the sum total product of which their own minute tasks form a part. To vision this "assembling," to give others some vision of this "assembling," to encourage the spirit of co-operation by so fashioning the organization that the minds of each human unit are a reflex of the organization as a whole—this is industrial organization. To turn back to the parallel of the football team. Each member of the team plays his part, but is not contented with playing his part. He will not emphasize his part beyond its limits as assigned, for to do so is unsportsmanlike. Meantime, while holding himself in restraint, the final result is everything to him. It is to ensure the final result that he holds himself within restraint. This is to achieve the true end of organization. So we may venture on a definition. Organization is that process of arranging means to an end in so systematic a way as to conserve the full possibilities of the means in achieving the full possibilities of the end.

## What do we Intend to do?

That may seem so obvious as to require neither asking nor answering. It is just these apparently commonplace features of organization which are often overlooked. Not long ago a visitor to an American watch factory put this, our first question, to his host, the owner of the factory. "That is easy," replied the host, "We are here to make watches." "Will you kindly think again?" proceeded the visitor. After a pause, the host tried again: "Yes, I see my answer was not very satisfactory. We are here to sell watches." There was a difference between the two answers. The first answer obviously did not state the final purpose. Nor did the second answer quite satisfy the visitor. "I know people who sell things," he said, "but I doubt if you would recognize it as an achievement. I rather think your final purpose is to serve your clients so that they do and will buy your watches." Even so, the visitor might have gone further. The true question is: What do we *intend* to do? What is the intention lying behind the whole organization? To sell watches, to please the public by selling watches; to sell good watches, to please the public by selling good watches; to sell watches as good as can be made, always anxious and ready to improve them; to please the public by selling watches as good as can be made, and to be always anxious and ready to improve them. The differences may seem to be very fine differences, but they are real differences. We can put the differences to the test by considering which of the grades in the answers we should like to put into the minds of the workers as their vision. The philosopher Kant argued that the test of morality was whether we should like to see every one acting as we proposed to act at the moment. Without entering on a discussion which has gone on already for a hundred years, we may admit that, in respect of organization, it holds good. Here are a number of men and women working together in an industry. The leader—the owner or the manager—is asking this first question in the science of industrial organization. He looks over his factory, be it large or small, and he asks the apparently ridiculous

question: What do we intend to do? He will think out the answer very carefully, for it is to be the foundation of the structure of the organization which he is about to build. Then, having thought it out, he will do well to apply the test to it: Is the answer which I give to the fundamental question such as I would like every worker with whom I am associated to give? The American story of three bricklayers is to the point: "What are you doing?" asked someone to the first. "Gettin' my livin'," said One. "Layin' bricks," said Two. "Building a cathedral," said Three. The leader or the manager knew the aim. He had failed—not necessarily of his own fault, for other factors enter—to implant that aim in the minds of two of his three workers.

In most cases, however, we need not go so far. If the man at the top clearly envisages the ideal at which he is aiming it will be infectious. The trouble is that he does not pause to think it out. Like our friend the watchmaker, he takes it for granted, and as a consequence only takes half of it. There are philosophers who base moral freedom just on hesitancy, no more. It is a good thing at times to hesitate. We drift into semi-automatic thought as well as semi-automatic deed, and if organization is to be of any value it must be deliberate from the very beginning—the genesis of the first intention in the mind. What do we intend to do? It is a more searching question than we suppose. It may be that we are trying to establish a business, that this means competition with rivals who may not be too scrupulous; that the methods have to be focused so that acuteness and keenness and courtesy and consideration and experience may all be brought to the aid of scrupulous competition. It may be that the aim is to preserve a business, that other people's livelihoods are at stake, that pride of past generations is tottering. It may be that there are bigger and bigger ambitions ahead; public life, for instance, more social prominence for those whom we love

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A Well-arranged Provision Dealer's Shop

—not an ambition for everyone, of course, but by no means to be despised as a stimulus. If these are the ultimate aims, it is healthy to face them. The man who thinks he has secret aims which his associates cannot conjecture is living in a fool's paradise. So it can be said that the answer to the first question is for the simple-hearted. There may be admixtures, for the best of us is very human, but in so far as the aim is not a corporate aim, in so far as we are asking fellow mortals to share their toil and hopes in an endeavour of which it cannot be said that there is a common aim or common effort, to that extent the foundation of our organization is impaired.

## By Whom is it to be Done?

Of course, the work is to be done by persons. It may be that the work seems to be so simple that it matters little at first blush by whom it is done. We may go to the Labour Exchange and get our workers, our labourers, and proceed with the work. No conception of organization worth the name will be satisfied with this. We should not be prepared to buy a machine with the same readiness. We should require a trial or a guarantee or some sort of indication that the machine will prove to be worth the money. Also we should take care of the machine. We oil the lawn-mower carefully after use; if it seems to be wearing out we look up the record of the purchase, and if it has not fulfilled expectations we complain. We need to be just as precise with our human machines. In saying this we are leaving the sentiment of human corporateness and responsibility aside for a moment; we are speaking merely of the common-sense of investment in human labour. We shall have a careful record of the time they begin to work, the conditions attached to their employment, and the occasions upon which the remuneration is re-adjusted and the reasons for the re-adjustment. The old-fashioned habit of each family keeping a record of births and baptisms and marriages and deaths in the first leaves of the family Bible has a rich meaning, for it was a crystallization of these elements in family history. It is all very well to react from red tape, but the discipline of such a record as just indicated, even in small industries, is of great value. No doubt casual employment does tend to looseness in this respect, and yet the moral aim should be to mitigate casual employment, and where it cannot be mitigated, to have such regard for each casual worker as to treat him for the moment as if he were permanent. The record need not be elaborate. At least it should show clearly at any moment of time those who are being employed and at what cost. It might go a little further. It might show the more grave negligences and offences, and thus it might convey to all the workers some sense of a deliberate judgment of such delinquencies. As regards choice of workers (if a choice is practicable), it should be remembered that every industry or business cannot expect to have chosen workers. Mr. Ford, at his great factory in Detroit, argues that every individual industry should have its share of the lame and the deaf—and even the blind. Probably it is less difficult to arrange this in a large than in a small industry. It may be, on the other hand, that the more intimate knowledge which is possible of each individual worker in a small industry, to some extent is a balance for the necessity of treating each individual as a similar unit in a large industry. The point to be remembered is that those we have chosen for our organization, as far as we possibly can, must be given such work as they are able to do best, and the allotment must be made in such a way that we are laying the foundations for fulfilling the second of the four demands, as we have stated them, of sound organization: "The devising of means to that end and of the best means." There has been a tendency lately to complain of the human quality. It is said, for example, that the elementary schools do not give as good results as they used to give. It is said that young men and young women are frivolous and pleasure-loving and disinclined to take their work seriously. It is said, finally, that middle-aged men and women have become selfish and self-centred, grasping and indolent. This is no place in which to rebut these ideas, even if it were regarded as perfectly clear that they are without foundation. But it may be said that there is always a temptation to complain of one's tools, and that it is not a good workman who does so complain. After all, human nature is malleable; it is sensitive to influence. If we do not set out to encourage what might be called the more serious outlook on life, if we do not make an industry—however large or small it may be—into a place the atmosphere of which encourages corporate pride and mutual endeavour, then it is of little use complaining. For all of us need some training in everything which we have to do. Babyhood is all training. Childhood is training. When we come later on into business, we should not be expected to pick it up as we go along. Some opportunity for learning sound principles and approved methods should be afforded if organization is to be worth anything at all. Of course, there are those who say: "I had no training: I had to rough it." But is that circuitous method of training all to advantage? Admittedly some methods of training do go too far, do come too near to spoon-feeding, and the individual loses strength and character thereby. But we are talking of teaching principles and methods, of showing the new hand, on some well-thought plan, what is expected of him, and how that which is expected of him will fit into that which is expected of others and into the general product of the whole industry, and into the disposal of that product. A certain shopkeeper, on a rather

considerable scale, in a small town near London, always seems to have trouble with his boys who deliver goods. There are mis-deliveries and delays in abundance. He was asked one day, did he train the boys. "Train them?" he said, "for a job like that? Not likely!" Little wonder that three boys were delivering in one road, that the packages were so placed in the cycle baskets that again and again the boys have been seen to unload the whole basket to find a particular parcel. It would not seem to require much thought or originality to have arranged routes for the boys, to fit the parcels in the baskets in the sequence of delivery, and to influence the character of the boys by the fact that someone thought their work worth planning and organizing so as to increase the boys' respect for their work. For, to the mind which sets out to find the principles of organization, there is no unimportant work. Every link in the complete chain is of the utmost value in relation to the whole. In fact, it is what we have been prone to regard as the unimportant work which really needs the most thought in the organization, and one of the reasons why there has been discontent on the side of the workers has arisen from the fact that the organization itself has not shown any respect for their particular work. Leadership—and leadership is a very big factor in organization—never despises any work; among many lessons which we have learned from military science, this is the first in value.

## Co-ordination.

To put the same line of thought in a positive rather than a negative direction. Not merely must we take the greatest pains not to seem to despise any work, even that which apparently is the humblest, but we must set out to co-ordinate that work with other work, and show definitely and clearly what the relation is. That means putting it in writing. Everyone who travels by steamer knows that the organization of what is to be done at a time of peril is all arranged, and that at different points on the ship there is a framed chart in which the duties assigned to each person are carefully indicated. But, says someone, that is for a time of peril. Would you take such precautions for a business which may go on placidly and securely from day to day? The answer is that there is no placidity or security. The idea of placidity and security has done infinite harm to business in England. When Napoleon said we were a nation of shopkeepers, he might have added that we were a nation of secure and placid shopkeepers. A shaking has come in many places, and not before it was wanted. The wise business man regards his business as in peril every day. He is no more sure of himself than the captain of the steamer is sure of reaching port. Every little pains which the organizer takes will repay itself. If he writes out a chart of rounds for his messenger boys, it will have a healthy influence on them, and it will not be devoid of influence upon him, too, for he will watch operations day by day with a view to altering and adapting the chart. It is a thoroughly healthy process. It means the recognition of each individual unit as an active agent in the whole enterprise. It means answering our second question as to who is to do it. It means a co-ordination in the mind of the organizer between what is being done and who is doing it. It means getting away from indefiniteness and casualness. The writer once happened to be passing the wall of a certain small industry in outer London when he heard the loud voice of the manager shouting to a group of workmen: "Some of you chaps come and work in the other yard." It does not need elaboration. It is a fit conclusion for a section which is pleading for the recognition of the human unit in industry. By this is meant the recognition as an active unit. The moral recognition of welfare will follow. It may not be a part of the actual organization, but the owner or manager who sets out to organize his industry on sound lines will not forget that the human beings whom he directs are themselves delicate organizations, having faculties and organs for the exercise of which opportunity and some training are desirable. Once he begins to be an organizer, his vision is widened and his responsibility is deepened.

## How is it to be Done?

There is a good deal more in this apparently simple question than appears at first sight. In fact, the very heart of true organization is involved in the answer. It is obvious that there is a right and a wrong way of doing everything. In fact, this truth has been enshrined in a proverb. But when truths get crystallized in proverbs there is always a danger lest they are not quite so absolutely true as the proverb would indicate. There is a right and a wrong way of doing everything, but the right way is not always the same right way, and what may be a wrong way of doing something in one particular industry may have something to be said for it in respect of another industry. Thus we must not be contented with a vague aspiration such as the attempt to do things "thoroughly," or "in the best way"; we must consider what is the particular best way for the sum total of the task which we have in hand. This involves preliminary "planning." In this section we are dealing only with principles, and consequently we need not go into the full details of what planning is or how it is to be attempted. What we wish to emphasize as part of our examination of principles is that there is no work so simple or so governed by routine as to make planning unnecessary. We may take an extreme illustration. I want to build a house. I will get the best carpenters and bricklayers I can find and say to them: "You are all expert men. You know your

job. Now build me a house, worthy of your skill and experience." They are helpless. They cannot begin. They need a plan. Stated in this form it looks ridiculously obvious ; yet if we apply the principle to ordinary industries around us we shall find that that is exactly what is happening. It is taken for granted that the skilled workman knows what to do ; but, while it is true that he knows

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A Small but Attractive Shop Front

how to do it, there should be a precise planning arrangement to tell him what to do. The writer saw a little bit of organization the other day which was very pleasing to a student. It was in one of the multiple shops of a large retail business. Two young men were selling butter and margarine. One of them, a little the senior apparently, with wonderful deftness cut the oblongs, almost always, as far as could be seen, gauging precisely the weight. The other young man had three functions. He was understudying the senior so as to be ready to take up the work if need arose. He accepted the oblongs of butter or margarine as they were handed to him by his expert senior, then with equal deftness he wrapped them up, made out the bill, and passed the block to the customer on the return of the receipted bill. Thus, the position was : Customer A asked for a pound of butter ; the expert cutter prepares the oblong ; Customer B asks for a pound of margarine ; the understudy wraps A's parcel and hands the bill to him ; Customer C asks for a pound of butter, while Customer B's is being wrapped and the parcel is handed to Customer A on presentation of the receipted bill. Now it was worth while stepping down the street and watching two other salesmen, altogether unorganized, deal with customers for butter and margarine. They got in each other's way. Both wanted the same pile of butter or margarine at the same moment and one stood idle perforce. Both struggled to identify their customers and occasionally got confused. Both

passed the butter from the scales to the paper, and it looked messy and unattractive. There was delay to the public, and the attendants were worried and harried. We have tried to give a mental picture of these two scenes because they illustrate the point precisely. In one case there was planning and thought, directed to the particular situation. In the other case, two really expert men were employed, but there was no planning for the particular situation, and the men struggled along as best they could, and very possibly, if the truth were fully known, in their struggles there was some loss of cash to the business, for worried and harried men cannot safeguard accounting in small sums.

Thus, to some extent we shall have to proceed by functioning. This is a word which has come to the foreground in the study of organization of recent years. In discussing principles, we shall use the word modestly and moderately, not pressing it controversially in those particular directions where there is a difference of opinion. Functioning is not the same as specialization. It may involve specialization, but that is only accidental. Functional methods involve the attempt to organize various operations in such a way that there will be, at the time, a primary function for each worker. It is not the same thing as division of labour. It may mean that a number of workers may have functions allotted to them differently on different days, and in some cases even differently on the same day. The advantage lies not so much in the actual performance of the work functionally, though there can be little doubt that there is an advantage in it, but from the fact that the preliminary organization or planning is bound to be more efficient and inclusive if it sets out to consider the task as capable of functional division or allotment. As an illustration we may take an example from an occupation which is not likely to fall to many of us. Suppose, with the aid of four assistants, we have to organize a field-day for children, including a railway journey, let us go about it functionally and non-functionally. First, we will try the non-functional. The five of us will buy tickets for the separated groups in our charge. We shall each arrange the seating in the train for our sections, the games on arrival, the meals, and the return journeys. We shall pass from one function to another. Then let us try the functional system. One will be in charge of transit. The others will help, strictly subordinately to him, so that he will give the decisions as regards seating, and we shall all strive to carry them out. One will be in charge of games and will be assisted similarly. Another will be in charge of meals, and another in charge of wet weather alternatives. It means that there will be less conflict and confusion, that there will always be one mind focusing itself on a particular aspect of the enterprise. Thus, it may be said summarily that planned organization leads necessarily to some adoption of a primary functional system, that is, it is primary only. In a subsidiary sense, the person who undertakes one of the primary functions may have other secondary functions, but the primary function will always be clear and definite.

We may apply this broad principle to any industry, however small. Of course, there are fine details to be considered. Recent developments of what is called Scientific Management will enter, though they are not appropriate to our study of principles. It will be to advantage if they are studied. Motion studies, rhythms in industrial operations, the relative advantages on the one hand of habit and sub-conscious working, and on the other hand of change in operations, will need to be considered in their balance. All this will be included as part of planning, but it is rather more than the fundamental questions of the principles of organization. These principles, as principles, are fulfilled by the suggestion of the study of division by function. How far that division is to go is a question of expediency to be considered in the interests of the particular industry. For example, while all may agree to a certain broad division in respect of function, it may not be wise in a small industry to rob the workpeople of some variety of work. After all, the small industry can only subdivide functions minutely at the risk of having only one person performing that function, and this may lead to difficulty in the case of absences. The important point is that whatever division is made must be clearly understood, frankly recognized, and must be not only theoretical but an actual day-by-day division in practice. Also it must never overlook that central criterion of effective organization that all means must be directed to the end. It will be well to reveal by some means or other to each worker the sum total of all the work done. This has been admirably achieved by poster, in some cases; in others, a system of lectures has been tried. Where these are too formal, it is possible to provide for it by giving each worker some insight into what corresponds to the sales department. There they can see the relation of their work to the completed whole, and to the attitude of the public to that completed whole. In some such way, especially in a small industry, the dangers which follow separation into functions will be checked.

But in respect of this interlocking of function, it is particularly important that the relation of function to function should be the subject of earnest consideration, if possible with the workers themselves. It is a remarkable fact that even where the methods of doing work have received close study it has often happened that there are gaps. The relation of worker to worker has not been thought out in proportion to the relation of individual worker to the final end. Questions of convenience of position, of easy transfer of parts, of

ending one function where another may begin, may seem to be questions of detail, but in point of fact they approach the fundamental questions of principle. After all, the central aim is the prevention of waste, and no amount of organization will achieve its end if there are rough edges or gaps or insufficient fusion between the parts. There is, of course, the paradox of organization, that it must not be over-organization, that it must leave some room for expansion on the part thoroughly efficient from the point of view of the central task of the industry, that is, the production of goods, and also, not subordinately but co-ordinately and in parallel, the cultivation of the worker's own intelligence and character. This may be attempted by an intrusion into private life which is offensive and also is degrading. We are speaking only of organization of the industry itself and of the recognition, within that organization and as part of its purpose, of the ethical values.

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GENERAL VIEW OF A WORKROOM IN A READY-MADE GOODS FACTORY

of the individual. This will be recognized, and in truth it is only in the larger organizations that there is a serious risk, for, in smaller organizations, the danger of making an individual worker into an indispensable peg in the machine is practically a sufficient safeguard. Yet the organizer has to bear this danger in mind. He has to look far ahead. He has to consider in what way he is binding the good worker more closely to the industry, so that he will give not work only, but intelligent suggestion and whole-hearted co-operation. The human relationship between control and worker can only be satisfactory if it is based on a wholesome desire to make the organization

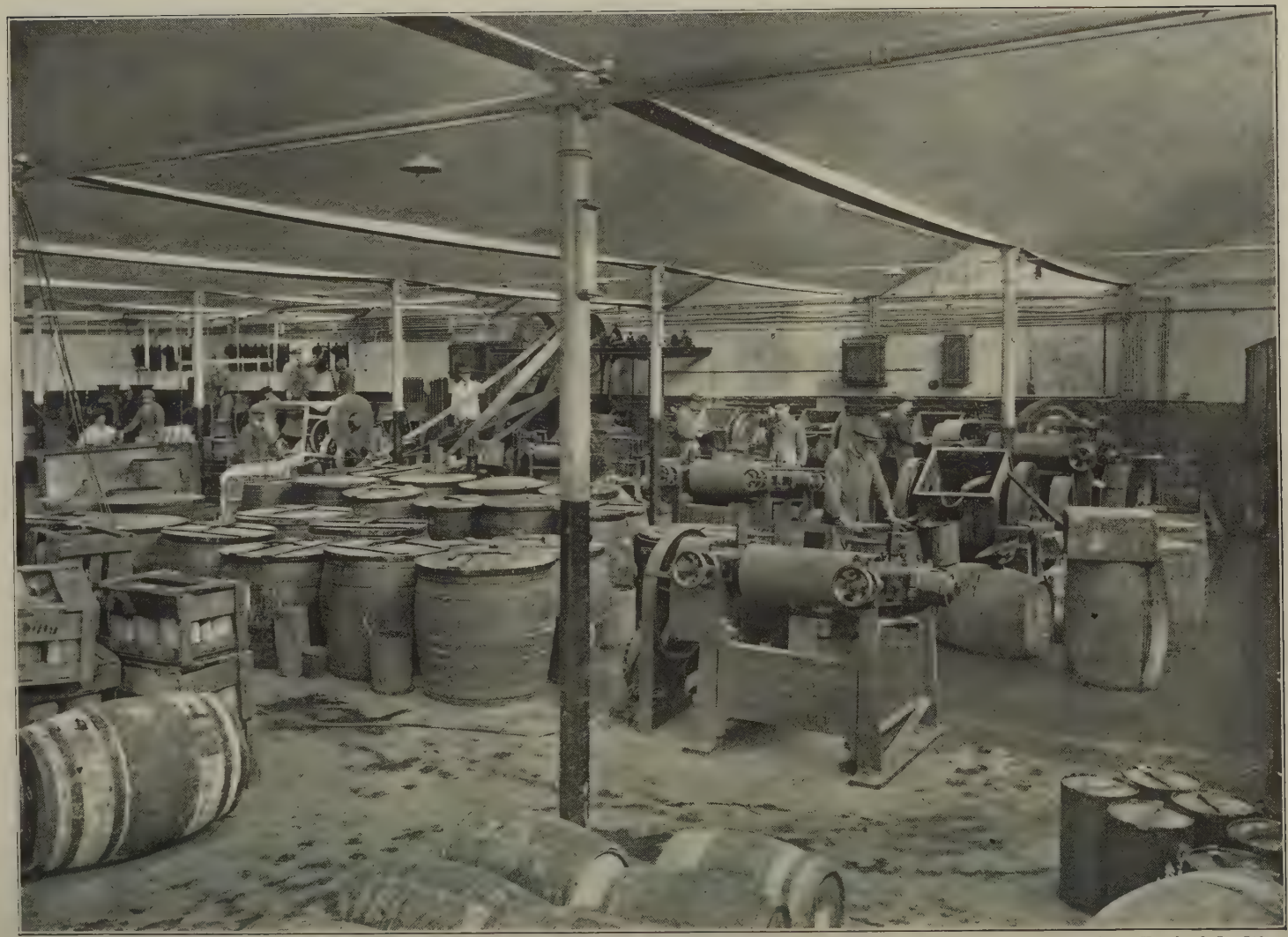
It may be that on looking back on the history of industry in the past twenty years, we shall be led to the opinion that lack of true and inspiring and morally responsible organization has been responsible for far more of the discontent than the Capitalism and Competition to which it is generally assigned by orators. So we may sum up. In respect of how the work is to be done, there must be careful planning, allotment of functions, direction of those functions to the mutual encouragement of efficiency between function and function, and intelligent comprehension of the final end from the point of view of the function.

## How do we Know that the Work is Being Done?

It is very important that we should be assured that the organization which we have devised is really working. The same problem occurs on the national plane. It is not sufficient to legislate, to pass Acts of Parliament. We must also make sure that the Acts do become acts, that is, that they are carried into effect. For this reason we need administrative departments and inspectorial devices, such as the police. But it is obvious that, in respect of industrial organization, we shall set out to have the fewest possible of such devices. We shall seek automatic checks. There is one automatic check which is of primary but not of exclusive value. The sales of the article which we produce do indicate that the work is being done. but the fall in sales does not help us to put our finger on the defect. It may be that the sales department is at fault, that the display or the publicity is defective. It may be that there is a defect in the inspection of the product, that the quality has fallen off. It may be that rivals have either introduced an improvement or reduced the cost of production. Under all these headings, or under any one of them, there may be a deficiency. Now, organization is not content to wait until a fall in the demand reveals its deficiencies. It must include within its scope some method of inspection which will judge the work in detail as it proceeds. In large industries this is primarily accomplished by supervision. The foreman is entrusted with the survey of the work as it is done. He rebukes or encourages. He shows how the operations ought to be done. In some cases, where piece wages is the system and quantity is thus provided for, it is his work to check quality. Under the earlier systems of Scientific Management there were functionalized foremen, and the worker was supervised by a number of men, each from a different point of view. This arrangement has now been generally discarded. It proved to be cumbrous in practice, and its excellence in theory was not manifested in the result. So the principle of definite unitary supervision has been re-introduced. Yet it is to be admitted that supervision as a final test has not been proved to be completely satisfactory. If too much dependence is placed upon it, the workers are encouraged to work with "eye service," and thus to take advantage of the moments when the attention of the supervisor is diverted. For this reason, attempts have been made to discover methods of costing, so that there might be statistical as well as personal supervision. For small industries, where it may be that the only supervision is the proprietor, this is an admirable method. The proprietor has so much to do in other directions that it is not likely he can give constant supervision to the actual work. He needs, therefore, in an especial degree the help of statistics which will apply automatically in his absence.

## Costing.

There is quite a literature on costing. It has been raised to the level of a separate science. We are not concerned, in dealing with principles of organization, with these developments. It will suffice for our purpose if we outline the principles of costing. What does it cost, at each stage, to produce an article? The various operations may be divided up and the total cost of each operation divided into by the number of articles produced; that is, the number at each stage. An interesting example may be found from an instance which took place during the war. It was discovered by a method of precise costing that the cost of making lids for tin cans for tobacco, or powdered soap, or other condiments, was out of proportion to the cost of the cans. Out of this arose the idea that cardboard ends might be used. Of course, they were not a full substitute for the lids, but they served at a time of stress. If the manufacturers had been satisfied with knowing the number of lids which a man could make in a given time as a test of his efficiency it would not have revealed the fact that they were a somewhat extravagant addition. Extravagance is a comparative term, and it was necessary to know the proportion of cost due to the manufacture of the lids of the boxes. There must be an appalling waste of tin boxes used for packing tobacco, yet we can understand the reluctance of a tobacco-packing industry to avail itself of a cheaper device. Probably the customers like the tin box and do not believe that the tobacco can be kept in a suitable condition by any other means. This alone is not a justification, and the manufacturer, having granted the claim, still requires to know what is the exact cost of so doing, and of each part of it. Management statistics are of great value in testing every aspect of industry, but management statistics must be used by those who understand their living meaning. It is not sufficient, as we have seen, that we should know the cost of making tin boxes without taking into account the consequences of a change in practice; it is of great value, however, to know the precise cost of each portion of the completed product. The final statistics should be reduced to a simple formula, just as the railway management statistics speak of the ton-mile or the passenger-mile. The surest way to improvement of method is to have full management statistics. They are a self-criticism. They operate semi-automatically. They enable comparisons to be made between day and day, hour and hour, operator and operator, but always within the limits indicated so far as the final result is concerned. More than that, they give precise data for the justification of the introduction of machines, and, in some cases—they are more frequent



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SECTION OF A PAINT-GRINDING FACTORY

*Frontispiece*

than is generally understood—they open up the way for a fuller discussion of advantages which are claimed for machines. It is only a well-organized industry which is able to study the question of a proposed machine with sufficient data to enable a sound opinion to be reached. In most cases, to this day, machines are introduced by a sort of instinctive judgment. We have not yet found a proper perspective towards machines. We are still under the glamour of the Victorian age, and are too ready to be impressed by the bare fact that, because a machine will do some wonderful feat we are therefore bound to substitute it for human labour, whereas it happens that, in many cases, it has been found that a slight improvement in human skill or industry would effect at a trifling cost all that is claimed for the machine. It is only an industry having very precise working statistics of all costs which can face this problem and look upon machines with impartially cold eyes. Statistics, to be of real value, are troublesome to take, and they are costly. This often brings us under the temptation to do without them ; the temptation should be carefully watched. Behind the use of machines is the subtle human factor. The English makers of boots, by the use of machines and of methods which were brought over from America, are now in the proud position of having boots advertised in Boston as being " Real English Boots." It was not because of superiority in leather or in workmanship. It lay in the superiority of management which was able to put the costing statistics to their best use, and in that superiority of management or organization there is to be included the fact that there were workers who were just as eager to re-capture the boot trade for England as their masters.

No general method of costing statistics can be shown. Many different systems are in use. The point to be remembered is that, when organization is devised, there should also be laid down the needs as regards statistics. It should be part of the general planning of the organization. It may be well to discover maxima and minima costs for each process. There is room for a little variation, but in the main it should follow that, as methods of working improve, the cases in which the cost of production of any portion of an article will increase should be very rare. In respect of particular aspects there may be an increase. It may be necessary, in order to stimulate the sale, to increase the cost of the sales department. Or it may be necessary, in order to hurry certain goods to their destination, or to get certain raw products quickly, to increase the cost of transit. These cases will be considered on their merits as individual cases, but costing as a working basis will deal rather with the normal. That is its function as a piece of administrative machinery, as portion of the organism of control, so to speak. As an illustration we may give a case in which the cost of paying wages by different systems was compared. There were a bewildering number of influences affecting the result, the difference between the cost of paying large sums compared with small sums, when placed on a " per pound " basis, the question of cost in calculating complex periods of overtime. Yet, when all was considered, it was rather surprising that the general cost " per pound " did not differ so widely as might be supposed, though individual firms found that one week differed very appreciably from another week. It appears, therefore, that a general standard of efficient payment of wages can be reached ; it can be put on a costing basis, and though we must not expect to work to that standard at all closely, yet it is a reasonable guide to efficiency in organization.

## High Ideals.

This is a useful indication in a broad sense of the usefulness of the costing test. The organizer will not be contented either with supervision or with costing as a final test. He will strive to have all the minds in the industry a real part of the mental organization. He will not be contented with anything less than the enthusiasm of everybody for the honour of the product. Of course, he may fall short of that high standard. He will remember that he is trying to make an organism out of human beings, and that it is one of the merits of human beings that they do not like to be put into a mould. Out of that natural dislike, political freedom has arisen in the past. Organization must not attempt to introduce a new tyranny in place of the old ; more than that, it must be scrupulously careful not to seem to do so. Thus, while the full achievement of the aim seems to be impossible, yet it is no less incumbent upon us as an aim. There is something lacking in an organization which does not recognize that it is intended for a higher purpose than it is likely to achieve. It may be that as we persevere with organizations we shall come nearer to that high level of achievement, and that the full spiritual freedom of individuals, their freedom of will and thought, will be capable of inclusion in an organization which will be all the more successful because it is the focusing point of the corporate will of free men.

## How is the Organization to Test Itself ?

This is all the more important a question because it is so often overlooked. People misunderstand the suggestion that there should be preliminary planning. They come to think that it means that all the planning should be preliminary, and that it should cease when work begins. " The work of thought is never done," said the eighteenth century philosopher, and it is a good motto for sound administration. But it involves rather more than appears on the surface. It involves

at once some method actually of looking at itself, It is one thing to say : " This is my organization. I will set it going. If anything happens to reveal a defect I will be broad-minded and I will amend it." That is altogether insufficient. It hints at the mental confidence that no defect will be found, whereas the truth is that human organization of any kind only exists by the frank recognition of its defects. The philosophers are claiming that in philosophy there is no standing still ; there is development to a certain point and then retrogression. Whether or not that is true in philosophy need not concern us here, but it is true of organization. Immediately we say that we have an organization on a high level of perfection, and that it will now serve its purpose, we may look out for trouble. To say this is altogether different from admitting that there must be pauses from change. We cannot always be violent. Organization needs rest as do human beings and machines of other kinds. It is quite possible that, while we are seeming to let the organization alone, while we are making no changes but trusting to each function to be duly performed, we shall find the golden opportunity to consider in what way the organization as a whole has fallen short of its purpose. Such a test is good for the organization ; it is even better for the organizer. Self-criticism is the rarest of virtues. It belongs, perhaps, as little to the heads of small industries as to anyone. They are admittedly in a difficulty. They cannot shelter behind a board of directors, or behind a cohort of assistants. They themselves must maintain some shadow of an infallible dignity and it is difficult to maintain.

Yet they must take the risk of being wrong, and, what is more serious, they must take the risk of admitting, by means of frank changes, that to some extent, at any rate, they were not as infallibly right as was supposed. Of course, it is possible that at a later date there will be some institution or body of experts ready to place at the disposal of the organizer stores of experience which have been gathered elsewhere. It is a pity not to benefit by the experiences of others. The object of these pages is to assist, so far as they may, in that direction. At the same time there is much to be said, once the organizer has studied all that he can obtain on the subject, for an attempt at the initiation of an organization suited to his own purpose and having something in it of his own personality. While this is unmistakably true, yet something further must be said. The organization must have some means of looking back on itself. All human aggregations have an odd knack of developing in unexpected ways. It is a commonplace of political institutions that this has happened. At the moment, men and women are telling the world that the Cabinet is performing functions which were never intended. If this is the case in a parliamentary system living in the public eye, how much more may it be true of a unit industrial organization ! We can see an excellent example recorded in Mr. Trevelyan's *British History in the Nineteenth Century.* There he shows that in 1794 the Attorney-General claimed that it was High Treason for any man to agitate for the establishment of " representative government, the direct contrary of the government which is established here." Within forty years, without any actual change in the Constitution, it was argued that representative government was its fundamental characteristic.

## Power of Adaptation.

Now it is very evident that a sound and well-based organization will include some power of adaptation. That is the central difference between an animate organization and an inanimate organization. It has often been said of bees that, though they have a wonderful organization, it has no power of adaptation. Probably this is an error, and that it is rather the case that over the period of thousands of years there has been considerable adaptation, but so slowly as to evade our observation. But of human organization it is undoubtedly true that it must adapt itself, just as we have seen that the British Constitution has adapted itself. Indeed, a perfect organization, perfectly planned, would leave the human unit so tied to the chariot of routine as to find the position intolerable. Further than that the self-criticism which must be a characteristic of organization, will always be ready to see tendencies of change or of a demand for change. This is the paradox of the principles of organization. While they ask for a definite allotment of functions and of responsibilities, with an appearance of finality, yet there must be a mental reserve which will suggest that all is not as final as it appears to be, and that there may arise a need for change and adaptation, not only to meet new conditions as they may arise, but also to meet more completely the circumstances as they may not have been fully understood at the outset. We may rest assured that the organization will not stand still. It will either improve in efficiency or it will deteriorate. In a sense every organization is a perpetual experiment. If it is a sound organization it will afford room to all engaged in it for their own development ; it will offer some means for them to make suggestions out of their experience. We can see an illustration of this in the history of the police. A little over a hundred years ago, there was no police worth the name. There were watchmen " whose proceedings were a constant theme of mockery." So much so that the mob represented vast criminal classes and the " criminal laws by their careless ferocity and irregular execution fostered crime." We read of the " young swells about town who would figure as popular heroes by knocking down at fisticuffs the last generation of old-fashioned

watchmen, and carrying off their rattles and staves as trophies." Then Sir Robert Peel's organization was brought into being. To-day the policeman will take a little child across the road, will be a repository of information for all sorts of enquirers, will help us in finding what we have lost and in restoring what we have found, and will preside like a good angel over the cross-roads in the village to the safety of passing motor-cars. None of this was in the early organization, but that early organization had within it the power of development and adaptation. The police was one of the notable contributions which London made to civilized peace; it was one of the striking instances of the perpetual experiment of true organization. This does not mean that the organization may be loose and flabby. On the contrary, it is the firmly founded organization which is adaptable. Probably it will offer some show of resistance to any change. That is not without its merit. There is an advantage from the fact that human beings, from use and wont, are apt to get fixed in an organization and to resent change. It means that a human organization, to succeed at all, must have some presumption of permanence. It must be a house built on a rock and not on sand. It will have to withstand storms, the storms of rivalry and of change in public taste and of difficulty in obtaining raw product. If it is established upon mutuality of relationship of all within the industry, it will only change in so far as change adds to security.

## Mutuality.

This brings us to the last aspect of the principles which we have examined. About a hundred years ago the worker was the "journeyman." He travelled from place to place, got work where he could, and passed on. That was the normal and the recognized relation between employer and worker. With all our faults to-day, we have come so much nearer to organization that we dislike a change of worker, and the worker has come to dislike a change of master. The relationship is normally expected to be of some duration. This means that the relationship must grow to be more intimate. Everyone knows that an entrant to a railway carriage is regarded by the rest as a hostile intruder. If it is a long journey, conversation may begin and before the end it will be found that an intimacy, sometimes even a friendship, has arisen. This is a homely instance of the value in respect of human relationship of prolonged association. It is a factor of vital importance. In all industries, large and small, it is becoming increasingly the factor which tells. In the United States at the present moment the problem of labour "turnover"—that is, the change of workpeople—is being carefully studied, and much of Mr. Ford's organization was designed successfully to check the flow. In small industries, greater intimacy is practicable, and it is probable that it is in the smaller and middle-sized industries that the sense of mutuality is most highly developed. An interesting American advertisement claims that a certain product is "as loved by them who buy it as by them who make it." This is a beautiful claim. It suggests that producer and consumer are bound together by a common bond. Organization could go no further. An industry which reaches this pitch of mutuality has approached a high ideal; even to make the claim indicates the ideal. Such an industry will be sensitive to the needs of its customers and will be ready to adapt itself to the strengthening of the bond. Most of us in our organizations will have to be contented with less than this, and yet it must be an aim. The organization of any industry will include worker and consumer, foreman and customer, in its range of consideration. To this end it will shrink from regarding itself as a crystallized perfection. It is the boundlessness of human possibilities which bid all organizers to be proud and confident in what they set out to do, and to be humble and self-questioning as to what they believe they have accomplished.

SECTION 10

# The Organization and Routine of a Factory

By W. J. Hiscox

## CHAPTER I

## ORGANIZATION AND MANAGEMENT

In these days of keen competition, when every manufacturer must needs put forth every effort to hold his own in the world's markets, the small man finds himself contending with those large concerns, the resources of which appear almost limitless, by reason of the capital at their disposal, and the powerful organization they have developed. And whilst in days gone by large concerns interested themselves in large matters only, to-day nothing is too small to escape their notice, and even the crumbs, which hitherto have been plentiful, are now scarce enough to be worth contending for.

Whereas in the past the small manufacturer has done very well out of the "leavings," to-day he has to fight even for these, and so he must needs be on his mettle if he would secure any business at all. He must revise the notions which for many years have yielded results of a more or less satisfactory character, and fit himself to give battle upon the ground where no favours are shown, and where the spoils must go to the most efficient. He must consolidate his forces and make a determined attack, which means that no weakness must be displayed. He must follow the example of more powerful competitors and organize, for it is only in this way that he can exploit to the utmost the capabilities of his factory, and ensure economical manufacture which will enable him to place his commodity upon the market at a competitive price.

In too many instances the small manufacturer is over-awed by the magnificence of the organization of the large concern, and fails to appreciate the difference between the varied interests in this case and the comparatively small ones of his own. He looks upon system and organization as a most expensive matter, to be undertaken only by wealthy concerns, and no doubt this idea is fostered by the spectacle of the ultra-modern and over-systemized small factory, the organization of which has been modelled on that of the larger concern, without taking into consideration the specific requirement of the factory, and organizing in accordance.

### Organization an Asset.

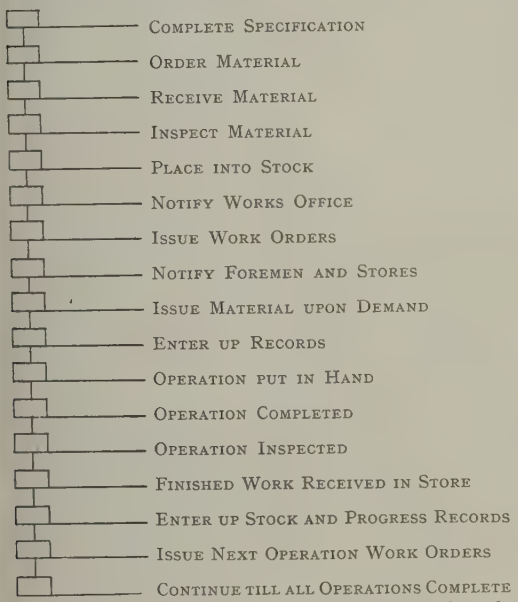
The organization, to be effective, must be regarded as an asset and not a liability, and this means that it must be wholly productive. It must have a definite aim, and minister to a definite need, and not be applied merely because it is "the thing," or because a competitor has already taken the step. It is wise to take notice of what others are doing—the successes they have achieved and how they have been accomplished. The ideas may be examined and *adapted*, but this does not mean that they should be *adopted* in their entirety, merely because they have proved successful elsewhere.

It is *your* factory which must be considered, and the needs of *your* factory which must be catered for. The organization you apply must be yours—an adaptation of the other fellow's if you like, but adapted to cater for *your* requirement, and it must be definitely identified with *you* and your concern. Every phase must have an object—the need must be known and thoroughly understood for the correct remedy to be applied, and when this is the case, system will not be a burden nor yet expensive. It means a thorough understanding of your own factory, and of the men, matters, and material associated with it.

The small man is apt to say: "System is all very well for the big concern, but I cannot afford it. It would not pay *me* to spend twopence in order to save a penny"; thus implying that the system, as applied to the large concern, costs twice as much as it saves. A few moments' reflection will convince the man that neither can the large concern afford to spend twopence in order to save a penny, and the fact that it *is* a large concern is proof that nothing of the sort occurs. It is perfectly true that if the system as used in the large concern is applied to the small factory, such a state of affairs would speedily happen, but the whole point is that, no matter how large or how small the factory may be, only that amount of system required to ensure efficiency is necessary; which obviously means that, the smaller the factory, the less need is there for elaboration.

## Necessity of System.

System is as essential to the factory employing a dozen men as to the factory employing 500 or 5,000. Haphazard control is no control at all, and management is impossible without organization. Every manufacturer, the moment he commences business, creates an organization. He has to build (or rent) a factory, equip it, engage labour, devise methods of manufacture, and sell his goods, and the only point is that, at the commencement, he does not always know the real strength (or weakness) of that organization. He may achieve a certain amount of success, but this does not mean that it is impossible to do better, if the capabilities of the factory are exploited and its facilities extended. The fault in many small factories is that the initial move is never supplemented, and the organization becomes obsolete on account of ever-changing circumstances, and is consequently inefficient.




The same procedure must be followed, whether the order is for 50 or for 500 pieces. The larger quantity is the more economical from an administrative standpoint, because no extra clerical work is involved.

Fig. 1.

Because a certain output has been achieved, it does not follow that the maximum has been reached. The factory, in the early days of its existence, never produces to the utmost of its capacity, no matter how satisfactory the yield may be, and the development of the organization will materially increase production. The management may be satisfied with the market captured and make no effort to extend, leaving this to the enterprise of others. But what will happen when these enterprising ones begin to encroach, and the management finds that it cannot hold that little bit of captured territory?

It is necessary nowadays to fight in order to retain a hold, and if by so doing it is possible to extend, then so much the better. If one manufacturer is content with that which he has, another is not, and he sets out to do better. His enterprise meets with success because, by developing his organization, he is able to increase output at a relatively lower cost, and is enabled, therefore, to place his goods upon the market at a lower figure.

The manufacturer has to take into consideration the fact that, no matter what his output may be, he has to pay rent, rates, taxes, and other standard expenses, whilst his administrative costs show but little variation. In this latter connection it may be observed that a foreman can handle 20 men just as well as he can handle 10, and the clerk can write out orders and instructions for 500 pieces just as easily as he can for 50 (*see* illustration). The direct labour costs are in many instances increased, but these are wholly productive, for even here the organization ensures a greater output per man, which means a lower cost per piece. This means that productive costs, administrative costs, and factory charges are substantially the same, whether the weekly production is 100 or 120 units, and the inference is that, if the production reaches the latter figure (when hitherto 100 has been the weekly output), the cost per unit is considerably less, and a corresponding reduction in the selling price creates a greater demand and extends the market.

## Simplicity the Keynote.

Assuming, then, that our small manufacturer is an enlightened individual, and fully aware of the importance of an efficient organization, the next point to consider is the steps he will take to exploit the capabilities of his factory. As he is in a comparatively small way of business, simplicity must be his keynote, and elaboration and complexity must find no place in his programme. He must be intensely alive, have a thorough knowledge of present-day conditions, and direct his actions accordingly. Whether he is about to commence manufacture, or whether he has been in business for quite a time, he is determined to have a system which will cater for every emergency, and which will ensure the maximum result from every effort.

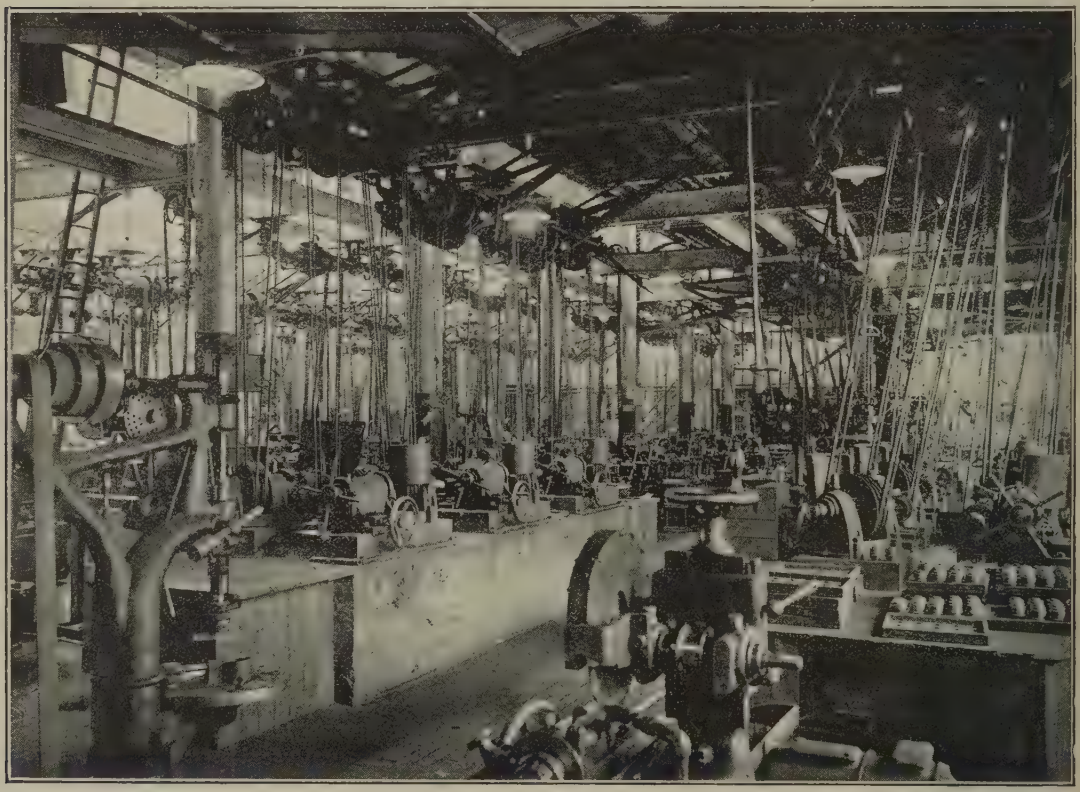
He is determined to have no waste, either of time or of material, and with this end in view the factory layout is devised to eliminate any superfluous movement; whilst the equipment and methods of manufacture are fully in accord with modern principles. He is determined that every man and every machine shall be fully productive, and whilst he will see that two men are not engaged upon the task which can be handled by

one, he will ensure that every task is efficiently handled.

Whilst instructions must be enforced, these will in no sense be vexatious, for they will accelerate rather than retard. Instructions will be clear and concise, and must be implicitly obeyed. Each man, woman, boy, or girl will have specific duties to perform, and will know precisely where those duties commence, and where they finish.

department, in addition to others devised to cater for specialized branches of the organization.

In the smaller factory a modification is necessary, and the specialized department is represented by a man, so that we get a planner, rate-fixer, and progress man; whilst the manufacturing departments are sectionized by means of grouping in accordance with the operation involved, yet in such a way as to reduce supervision to a minimum.



*By permission* *Messrs. Gillett & Johnston, Croydon*

SECTION OF A MACHINING DEPARTMENT

## Sectionizing.

Sectionizing is just as important in the small factory as in the large, although in the former it is accomplished by judicious grouping. In the large factory there is a section for everything, for specialization is insisted upon down to the smallest detail, but in the smaller factory, although the same principle is in evidence, the method of application must of necessity be different. In the large factory the manufacturing departments are sectionized, each section controlled by a specialist in the specific work involved. There is a planning department, rate fixing department, progress

In the still smaller factory it is not practicable to have each phase of the organization under the control of a specialist, for such a staff would be unwieldy in the circumstances, and so the grouping together of the various branches is resorted to. As an example, the works office may control the shop planning, rate fixing, and progress of work through the factory, whilst the costing office may control stock records, purchase of supplies, and the manufacturing cost records. It is all a question of degree, and the principle being understood, the method of application must be in accordance with the exigencies of the factory.

### The Mechanic.

But, however small the factory, it is wise to relieve the mechanic of all clerical responsibility, and so leave him free to devote his whole time to manufacturing problems. He is much more effective when he knows what he has to do, and the precise nature of the facilities afforded him, than when he is given an instruction in general terms, and has to spend a good deal of time in determining just what is expected of him and considering ways and means.

In other words, the mechanic can accomplish more if he is supplied with tools and material, so that he can go straight ahead and not waste time—if his path is unobstructed and he knows that the next job will be ready when he wants it. For then he can concentrate in the direction of economical manufacture, and leave all subsidiary matters to those appointed to deal with them.

## CHAPTER II

## APPLICATIONS FOR EMPLOYMENT, ENGAGEMENT OF LABOUR, ALLOTMENT, RELEASES, AND DISCHARGES

THE engagement of labour is a matter which has not been handled scientifically to any great extent, although in some of the larger factories the Employment Department is now a feature. It is taken for granted that the small employer of labour (no less than the large employer) is fully alive to the importance of attracting good grade labour, and incidentally it may be observed that, notwithstanding the outcry against scientific management on the part of many trade union officials, the well-organized shop is more attractive to decent labour than is the shop where smooth working is impeded by adherence to "rule of thumb" methods.

It may not be possible for the small manufacturer to institute a recognized Employment Department, but it is possible for him to engage and allot labour in a systematic manner. In the main, it is left to individual foremen or supervisors to engage or discharge the operators, and although it may be argued that these are the people best qualified to judge the nature of their own requirements, it is certain that, in the best interests of all concerned, such haphazard selection should not be permitted.

One fact which is not always recognized is that labour (no matter where it may be for the moment allotted) is of interest to the factory as a whole, and not merely to one specific section, and this being so, it must be treated as a factory matter. If the factory is not large enough to permit of the appointment of an employment specialist, then the matter must be placed in the hands of the man who is concerned with the interests of the factory as a whole, i.e. the works manager.

The foreman, concerned only with his own department, engages the labour he considers he requires, and discharges that which he considers inefficient or superfluous. He has his slack times and his busy times, and he must perforce act in accordance with the exigencies of the moment. But, looking at the matter from a factory standpoint, is it absolutely certain that he is doing the right thing? and, from the standpoint of labour, are his actions perfectly just? The operator he discharged yesterday on the score of inefficiency might have made good had he the opportunity of showing his capabilities under different conditions, and the one discharged solely on account of a temporary slackness would perhaps have been useful in another sphere of action.

Labour should be of absorbing interest to the works manager, and no engagement and no release or discharge should take place without his sanction, which would be deferred until he had full knowledge of the circumstances. The foreman should recommend, but not act upon his own responsibility, for by so doing he may inflict injustice upon the operator and cause the firm unnecessary expense.

When labour can be engaged or discharged in a casual manner and without comment, there is no incentive for the foreman to extend himself to regulate and control, and as a consequence the efficiency of his department is adversely affected. He may engage a man because he is temporarily in a fix, whereas if he had to apply for labour he would take other steps to overcome the difficulty. He may discharge a man on account of personal dislike or because of a petty delinquency; but if that discharge had to be ratified by the works manager, it is certain that he would not submit it upon any flimsy pretext. It is not suggested that the foreman would necessarily abuse his privileges, although such cases as those quoted are by no means uncommon, but in the interests of factory efficiency and economy, the handling of labour should be upon systematic lines, and the foreman who has the interests of the factory at heart will not cavil at the idea of submitting his recommendations to the judgment of a higher authority.

### The Gate-keeper.

In the small factory the gate-keeper plays an important part in the preliminary business connected with the engagement of labour, and much depends upon the intelligence he displays and the instructions he receives. Whilst applications for staff engagements are for the most part conveyed by letter, the manual worker applies in person. Many firms nowadays apply to the nearest Labour Exchange for the operators they require, and refuse to entertain personal applications at the

factory gates; but by far the greater majority of employers still prefer to rely upon their own judgment, and resort to the Labour Exchange only in default of receiving personal applications of a suitable character.

The gate-keeper receives information from the works manager in connection with the labour requirements of the factory, and for the benefit of personal applicants notices may be posted upon the gate, based upon the instructions received. For example, there may be a call for a specific type of operator, and the notice may read: "Turners wanted," "Machinists wanted," "Girls wanted, 14–16," etc.; whilst, if there are no vacancies, this fact may be stated upon the notice.

Such notices have the effect of attracting the type of labour required, and warning off intending applicants for whom there is no vacancy, but they are not displayed by those firms to whom labour is of absorbing interest, and who are desirous of effecting improvements. The severely practical and unimaginative works manager contends that he cannot employ a man for whom there is no job, but often the potential capabilities of a casual applicant will be discerned by a few minutes' conversation or a perusal of his history, and the job which can be made for him may have far-reaching effects which cause the manager to congratulate himself upon his achievement.

## Form of Application.

Whether the firm displays notices as described, or whether audience is granted to every casual applicant, the form of application as illustrated by Fig. 2 may be used, although in the former case it is reserved for qualified applicants, whilst in the latter case it is extended to every applicant. The form is filled up by the applicant and is sent by the gate-keeper to the works manager. Assuming that the qualifications of the applicant are in accordance with the requirement, the form is sent to the manager without delay, and the applicant interviewed before he departs, but if the application is entirely casual, the applicant departs after filling up the form, which is sent to the manager at the close of the day.

The form is, in this instance, perused by the manager at his leisure, and if he decides that the application is of immediate interest, he will at once write the applicant, fixing the time for an

**APPLICATION FOR EMPLOYMENT**

NAME——*William Jenks*—— DATE——*18th September*, 192 ——

ADDRESS——*43 Cross Street, London*——

REQUIRES WORK AS——*Labourer*—— AGE——*32*——

EXPERIENCE AND QUALIFICATIONS

| Name and Address of Previous Employers | Period of Employment | Specific Duties | Reasons for Leaving |
|---|---|---|---|
| (1) *Smith, Brown & Co., London* | *November*, 1918, *to March*, 1923 | *Stores Labouring* | *Reduction of hands* |
| (2) *Fish & Fowle, Ltd., Blanktown* | *June*, 1914, *to February*, 1916 | *General Labourer* | *To join Army* |

I CERTIFY THE ABOVE TO BE CORRECT. Signed——*William Jenks*——
Applicant.

WORKS MANAGER'S COMMENTS——*Engaged.*——*R.W.B.*
(Prior to Filing)

FIG. 2.

| FITTING AND ASSEMBLING | MACHINE OPERATORS | GENERAL WORKERS | TOOL MAKERS |
|---|---|---|---|
| | | | |

FIG. 3.

interview; but if, on the other hand, the services of the applicant cannot for the moment be utilized, the form is filed to future reference.

## Record of Applications.

It is wise to have a fairly comprehensive record of applications received, but this need not necessitate a deal of clerical work. The provision of a set of index cards will answer the purpose, each card giving the classification of the work required (*see* Fig. 3). The application forms are filed behind the card associated with the specific work desired by the applicant, e.g. all applications for fitting or assembling work will be filed behind the card "Fitting and Assembling," and so on.

In the case of applications received from general workers (labourers, helpers, etc.), the forms may be filed in sub-sections, according to the experience or qualifications of the applicant. For example, a man may ask for labouring work, but as he has had experience as a stores labourer or counter hand, he is likely to be of more use in the store than in the yard labourers' gang; whilst the application of a youth who has had no factory experience would be referred to when work of a specialized character necessitates the training of a young operator. So the applications under the heading of "General Work" should be made up of several subdivisions, such as "Stores Helpers," "Transport Workers," "Juveniles," and the like.

This record is referred to by the manager when additional labour is required, and if the forms are properly sectionized no difficulty is experienced in making a selection. It is not, of course, wise to write to an applicant whose form has been on file for some months, as in all probability he has already secured employment elsewhere, but as a rule the man who is unemployed will not content himself with making but one application, and although he need not be called upon to make out a form each time he visits the factory, his visits may be communicated by the gate-keeper to the manager, which will ensure his application receiving consideration as the opportunity arises.

## Engagement Record.

When the applicant is engaged, a form, similar to Fig. 4, is made out, and this, together with the form of application, is sent to the time and wages office. This form, which is signed by the works manager, shows the department or section to which the applicant has been allotted, the capacity in which he is employed, the wage rate (hourly or weekly), etc. Upon receipt of the form, a clock number is allotted, and the name and number entered upon the pay-roll, and when this has been done the form is retained on file in the wages office.

Immediately a worker is engaged he should be given the opportunity of reading the factory rules and regulations, which are posted in a conspicuous position. This, although largely a matter of form, is necessary, as it serves to obviate future trouble, and the engagement is ratified by the promise of the applicant to observe the whole of the rules and regulations displayed.

Whilst the ability and aptitude of the new worker are noted by the head of the section or department in which he labours, the works manager should evince a lively interest in his progress, for it should be the aim of the management to place the worker where he will be of the most value. If he is a good worker, the foreman will keep him at all hazards, and will in some cases even recommend for promotion a less efficient worker in order to retain the services of the better man. This is unfair to the individual, and it is also bad policy from the firm's standpoint; the active interest of the manager is, therefore, essential to ensure the development of the capabilities of every worker.

## Juvenile Workers.

To an even greater extent should the attention of the manager be directed toward the activities

**ENGAGEMENT RECORD**

NAME *William Jenks* CLOCK NO. 337

ADDRESS 43 *Cross Street, London*

AGE 32 QUALIFICATIONS *Labourer (Stores and General)*

ENGAGED AS *Labourer* AND ALLOTTED TO *Stores* DEPARTMENT.

DATE *19th September* TIME 8.0 *a.m.* RATE 1s. *p.h.*

SIGNED *T. H. Wood* FOREMAN. CONFIRMED *A.W.B.* WORKS MANAGER.

---

I have read the recognized Rules of these Works and agree to conform to the same.
(Signed) *William Jenks*

ENTERED ON PAY ROLL 19/9/2 BY *G. H.*

FIG. 4.

of the juvenile worker, for here the potential capabilities of the individual are relatively greater. In these days of specialization, indentured apprenticeship is but little in evidence, and there is a tendency in many factories to consider the juvenile worker solely in the light of the present requirement. The manager will do well to insist upon his foremen furnishing periodical reports concerning the progress made by each boy and girl, and act upon the information thus received in the best interests of the individual and the factory, bearing in mind the claims of the future.

## Transfers.

When an operator is transferred from one section (or department) to another, this fact should be officially recorded, and the reasons given. The transfer may be occasioned by the promotion or relegation of the individual, or it may be of a temporary character and occasioned by factory conditions, such as a shortage of work in one department, etc. If but a few days are involved, the transfer need not be officially recorded, but if longer then a form similar to Fig. 5 should be used, this being signed by the heads of the departments concerned, and confirmed by the works manager. This form is sent to the time and wages department, and filed with the application and engagement forms relating to the same worker.

## Release or Discharge.

When a worker wishes to be released, or is about to be discharged, the facts are communicated to the works manager by means of a form (*see* Fig. 6) made out by the foreman. Upon receipt of this, the manager may (at his discretion) see both the foreman and the worker, in order to get more detailed information and to see precisely what the contentious factor is. Workers should not be released or discharged lightly, and if there is a grievance its nature should be brought to light, but, on the other hand, the authority of the foreman should not be impaired by pandering to the foibles of the worker.

**DEPARTMENT TRANSFER**

To *Time Office* Date *6th Sept.*, 192-

Name *James (F.)* Clock No. 171

Transferred from *Labourers'* Department

to *Stores* Department

From 8.0 *a.m.* on *6th September*, 192

For Duties *Labouring*

This Transfer is sanctioned by *A.W.B.*

and agreed to by *J. Jones* } Foremen.
*T. H. Wood* }

Fig. 5.

The manager here has a delicate task to accomplish, for he often has to combat personalities in order to arrive at a just decision. The discharging of labour on account of slackness of business should not be insisted upon until the most searching investigation shows that the position cannot be remedied. The discharge of a worker on the score of inefficiency should not be confirmed until it is proved that in no capacity is the worker likely to make good; whilst, on the other hand, the circumstances governing the desire of a worker to voluntarily quit the service of the firm should be closely investigated, with a view to inducing the worker to reconsider his decision.

If, in spite of every effort, it is decreed that the engagement of the worker shall terminate, the form as described is sent to the time and wages department, the worker is "paid off" and his name removed from the "pay-roll," and the form is then placed with others relating to the same worker, the whole forming a comprehensive record of his term of service for future reference.

**WORKER'S RELEASE OR DISCHARGE**

To *Time Office* Date *31st August*, 192-

Name *Jones (John)* Clock No. 201

Employed in *Turning* Department. As *Turner*

The Above will Terminate his Engagement with the Company

At 5.30 *p.m.* on *Thurs*day, *31st August*, 192-

Reasons *Own accord*

---

All Tools and Checks have been Returned. (Signed) *F. Steel* Tool Storekeeper.

(Signed) *J. T. Blank* Foreman. (Confirmed) *A.W.B.* Works Manager.

Fig. 6.

CHAPTER III

## WORKS' STAFF MATTERS

THE success of any undertaking is almost entirely governed by the activities of the executive, and in the factory the importance of the staff must be recognized. The pre-war fallacy that the clerk is a non-producer and that his presence must be regarded as a necessary evil, has been exploded, but even to-day his importance is not thoroughly appreciated, the reason being that his scope is more is necessary to evoke that whole-hearted enthusiasm which is essential to real efficiency.

In the first place, the conditions under which the factory clerk labours are often directly opposed to sustained effort, for no man can be enthusiastic when his health is undermined. Even in the factory where organization has taken root, and where modern methods and systems are being applied, the "office" is nothing but a germ-laden den, yet seems to be overlooked by the zealous enthusiasts intent upon the transformation of the factory.

*Photo by* *Law Northampton*

A BOOT AND SHOE FACTORY

restricted, and his effectiveness is not, as a consequence, sufficiently developed.

The fact is that the factory clerk is given no incentive to interest himself in his duties, and he does just that which he is expected to do, without endeavouring to increase his value to the firm, and, incidentally, improve his own prospects. Improved methods of factory organization, involving sectionization and the development of the specialist, will in themselves do much to increase the productive value of the clerk, for they provide an incentive to effort by opening the way to promotion, but as this is often but a possibility, the materialization of which is uncertain, something

System and specialization involve the recognition of the clerk, which is in itself a great step forward, for nothing is worse to enterprise than mere toleration. The clerk, recognized as a potent factor, has his interest stimulated by the responsibilities placed upon him, and he will rise to the occasion if his environment permits him to do so. But if his health is adversely affected by being forced to labour in an over-crowded office, if he has to suffer discomfort by reason of primitive arrangements, and his endeavours are largely nullified on account of inadequate facilities—he cannot be expected to labour so cheerfully or effectively as when he is accommodated in a

well-situated and healthy office, with facilities at his disposal capable of extending his own natural resources.

## The Office.

The factory itself may not be particularly well situated from the standpoint of the health of the workers, for all manufacturers cannot build factories in the country, and many must perforce exist in less salubrious districts. But wherever the factory may be, there is no reason why the office should be dirty, dark, and badly ventilated. To be in an accessible position does not mean that the office need be in the centre of the factory, and have no direct connection with the outside air. Too many "offices" are boxes set up in the various manufacturing departments, in which the clerks breathe the air already vitiated by revolving machinery and the dust and grit set up by manufacturing processes.

The office should have direct communication with the outside air by means of window, ventilator, or air shaft. The floor should be covered with linoleum and kept clean, whilst the office should be large enough to accommodate the inmates without overcrowding. Whilst roll-top desks and revolving arm-chairs are not expected, it is well to remember that physical discomfort has an adverse effect upon mental effort, and the quality of the work is adversely affected. Lighting, too, is of the utmost importance, and whilst the cheapest and best (i.e. natural) should be utilized to the fullest extent, this should be supplemented by artificial light designed and arranged to cater adequately for the requirement.

The principle of "making the office a little better than the works" is one which will pay, for it must be remembered that it is upon the brains of the office that the efficiency of the works depends. And when the office has been modernized, and the duties of the individual have been scientifically arranged, it may be considered that the foundation of efficient administration has been well and truly laid, and schemes may then be considered for the building of the edifice.

Whilst natural aptitude will surmount difficulties and overcome obstacles, incentive is a most potent ally, for whilst natural aptitude impels the individual to embrace a trade or profession, and will carry him well along the road to success, an inducement, if strong enough, will force him to extend himself, and as a result his "natural best" is eclipsed. The greatest inducement is undoubtedly money, not for what it is, but for what it will do, whilst another inducement is privilege.

In many cases the latter finds most favour with the clerk, and would hold the predominant position, were it not for the fact that money is a necessity, whilst privilege is a luxury. The two, however, provide powerful incentives which can be used by the employer to advantage, and in the first instance we will deal with privilege, to see what can be done with this to improve upon the natural aptitude of the clerk.

In the first place, a shorter working day undoubtedly makes an appeal, and the clerk commencing his duties at 9 a.m. in the factory which opens at 8 a.m. feels that he has a definite advantage. This arrangement, however, is not practicable when the clerk is directly associated with the manufacturing departments, as for obvious reasons his presence is imperative at the opening of the factory. As in the circumstances this privilege cannot be accorded, the practice in some factories is for members of the staff to use a separate time-recorder and to be allowed a few minutes' grace in putting in an appearance.

Nothing annoys the average clerk so much as to be "locked out" and forced to await the opening of the gate because he arrived one minute "after time," and especially if he is expected to work overtime, for which there is no payment. There is a certain amount of reason in his contention that he should be allowed a "few minutes," and if the time he actually arrives is recorded and submitted to the manager so that he can be brought to book if the record shows that he has abused his privilege, no harm (and probably a lot of good) is done if his contention is upheld.

Payment for the overtime worked by the salaried man is made by some firms, but in the main, direct payment is not recognized. It is not proposed to enter into a discussion concerning the merits or demerits of this, as the matter will no doubt be settled by the individual firm and its staff, but, later, one method of discharging overtime obligations will be given. At the moment (as we are dealing with privileges and not monetary rewards) we assume that direct payment for overtime is not made, and this being the case, the person required to work overtime should be regaled with tea at the firm's expense.

And by tea is meant a meal, and not merely a "snack," such as is interpreted by many firms. A cup of tea and a biscuit is not sufficient to sustain a man after he has already put in eight hours of strenuous mental labour. Staff overtime should not be resorted to except in cases of absolute necessity, for habitual overtime is not a paying proposition, either to the firm or to the individual; but when the necessity does arrive, then the individual should be regaled with a substantial meal, in order for him to do full justice to the task in hand.

## Holidays.

The salaried man looks forward to his annual holiday, but the fact that the works are closed for the whole of the period (even though the staff man is paid whilst the manual workers are not) does much to dim the lustre of the privilege in the

eyes of the clerk. It is not suggested that the manual workers should be denied their holiday, but it is suggested that the staff workers' holiday be extended beyond that period, according to length of service, and as set out on Fig. 7. Assuming the maximum holiday for a staff worker to be two weeks, whilst the works are entirely closed for one week, the works holiday week would be included in the staff worker's holiday period, but he would be free to choose the other week, subject to the exigencies of the factory and the wishes of other people.

**ANNUAL HOLIDAYS FOR MEMBERS OF THE SALARIED STAFF**

| For the Factory where only Recognized Bank Holidays are Observed | For the Factory which is Entirely Closed During the First Week in August |
|---|---|
| These Periods are in addition to Recognized Works Holidays— | No Staff Worker whose length of Service does not exceed Twelve Months is entitled to a Holiday in excess of those accorded to the Factory as a whole |
| 3 Days' Holiday } If length of Service is over Three and under Six Months | If length of Service exceeds Twelve Months, Two Weeks' Holiday is allowed, One Week of this to coincide with the Works' Annual Holiday |
| 6 Days' Holiday } If length of Service is over Six and under Twelve Months | |
| 10 Days' Holiday } If length of Service is Twelve Months or over | |
| With an additional day for each subsequent Completed Year of Service to a Maximum of 14 Working Days (including Saturdays) | |

Fig. 7.

In regard to extended staff holidays, it may be observed that these occasion the firm but little expense, for no additional labour is employed, extra duties arising by the absence of one being undertaken by those left behind. The same remark applies in regard to absence caused by illness, although should this be protracted, other arrangements would of necessity have to be made.

Dealing with the incentives of a monetary character, the first is obviously the payment of a salary commensurate with the duties and responsibilities involved, and the second a reward for merit by means of promotion and increased salary. With the manual worker, however, it has been proved that more than a flat rate and periodical increases are necessary to provide the incentive to extend the capabilities of the individual, and so bonus schemes have been instituted which have had the desired effect.

## Bonus.

It is not possible for the salaried man to receive a bonus upon his individual effort, as in the case of the manual worker, but he may be given the opportunity of interesting himself in output, and extending himself to influence this, by the payment to him of a bonus in relation to the factory output, calculated on either quantity or value. It will be found that when the man's earnings are directly dependent upon his own efforts, his interest is stimulated and his energy more apparent as well as being more effective.

One scheme which is at the present time in operation covers the question of overtime and also that of personal application. No direct payment is made for overtime, which is discouraged as much as possible, but each year a percentage of the factory profits is allotted to the salaried workers and divided in accordance with the effective value of the individual. Whilst the amount of overtime worked is taken into consideration, far more attention is paid to the value of that overtime, and for this to be accurately gauged, the proficiency of the individual, and the efficiency he displays in the discharge of his ordinary duties, is carefully noted.

For the purpose, the factory is divided into three or four sections, each comprising a carefully selected group of workers, and the head of each of these sections specifies to the management the order of merit of the workers under his control. It may be found that at the head of the list in one section is an individual who has worked comparatively little overtime, yet his value to the company is far greater than that of another whose overtime record is much more imposing.

The points considered are (1) the importance of the duties assigned to the individual, as evidenced by the salary paid (for instance, the man paid £4 per week has more important duties to handle than the man in receipt of a salary of £2 per week); and (2) the degree of efficiency attained in the discharge of those duties, whilst length of service, general conduct, overtime, and time-keeping are also factors which help to determine the amount of bonus paid.

The first consideration is taken care of by the fact that the bonus takes the form of a percentage upon the actual salary paid, so that, all other things being equal, the man earning £4 per week has the advantage over a lower paid man. But it is efficiency which determines the percentage of

bonus paid, for whilst in the case of the £4 a week man the percentage may be 20, in the case of the £2 a week man it may be 30, 40, or even higher.

It will be seen from this that, although the man has reached a certain position, he has to work hard in order to keep it, for the younger members of the staff, by qualifying for a high bonus percentage, are putting their claims for promotion right in front of the management, and these claims cannot be disregarded. The scheme has the effect of putting every man upon his mettle, not only to quality for monetary gain, but to justify his selection for the position he occupies.

Many managers have complained of the indifferent attitude displayed by the members of the factory staff, but how many have seriously set out to discover the cause? Factory clerical life can be the most monotonous and deadly thing in existence, and it can be the most interesting. It is in the interests of the manager to ensure the latter, but this is only possible when adequate facilities are afforded, and the members of the staff are (through the medium of incentives) impelled to take an interest in their work and extend themselves in order to give the maximum results.

## CHAPTER IV

## THE FACTORY LAY-OUT

THE "lay-out" of the factory is a matter which must receive early consideration, for, unless the floor area is fully utilized, "speeding up" with a view to increasing production will not yield the desired results. It is not enough to crowd equipment into every available yard of floor space, for in this way the effective capacity of the individual machine or operator is restricted, because of the many obstructions; and it is not enough to install the equipment which, so far as can be seen, "comfortably" fills the shop, and assume that it is an impossibility to make further additions.

The capacity of a factory cannot easily be determined, even by those skilled in such matters, and although output can be estimated with a fair degree of accuracy under given conditions, the effect of even a slight alteration may be considerable. One factory, equipped presumably to its fullest extent, was re-arranged in such a way as to enable the output to be doubled, and this without any real extension to the building.

The manager may protest that he cannot go beyond the four boundary walls of his factory, but it is the area within those four walls which tests his ingenuity. If he is desirous of increasing output, his thoughts may fly to the introduction of up-to-date machinery, but this costs money, and before it is resorted to he must first make sure that the existing machinery is producing to its utmost capacity.

### Shop Planning.

It is in this connection that shop planning is instituted, which is based not so much upon theory as upon a thorough knowledge of the manufacture and a sympathetic understanding of its requirement. It follows the reasoning of common sense, for the conviction of the manager is that the factory is not doing enough, and that he must take the steps which will enable it to do more. The elimination of wasted time is the first essential, and by working with this end in view, shop planning automatically develops, and the capacity of the factory expands.

Let us, for the purposes of illustration, take two types of factory interested in engineering, one concerned with the manufacture of a specialized product, which may be a pulley block, a motor-car, or a moulding machine; and the other concerned with specific machinery for other manufacturers, such as capstan work, general turning, or gear cutting.

### Manufacture of Specialized Product.

The first type of factory is interested in an assembled product in its entirety, which means that the firm is responsible for design and manufacture, including the provision of raw material, the machining of the component parts, and the assembling together of these to form the completed unit.

The precise nature of the raw material is determined by the designer, and may comprise iron, steel and brass; these materials being subjected to a number of operations in order to reach the finished state desired. The iron may be in the form of castings, which have to be subsequently machined, and the making of patterns and the casting of the pieces are matters which must be considered in relation to the factory lay-out.

It may be decided to have both the patterns and the castings made outside, in which case only storage, machining, and assembling (and, of course, inspection) need be provided for; whilst, if the patterns are to be made in the factory, then a pattern-making shop must be added. On the other hand, it may be decided for the factory to handle the whole of the work involved, and this brings into existence both a pattern shop and a foundry.

The steel may be ordinary bar stock of certain diameters, and used for the manufacture of various component parts. The raw material would be purchased from outside sources, and the various operations handled in the factory. So far as machining is concerned, this is already provided for in connection with the castings, but in certain instances a prior operation may be necessary, this taking the form of forging or stamping to shape. If it is decided to have this operation done outside, no provision need be made inside the factory, but if the operation is to be handled in the factory,

then the lay-out must include a smiths' department. The brass may be either cast, stamped, or merely machined from bar, and it may be assumed that, whatever procedure is followed in connection with iron and steel, this procedure will also be followed in connection with brass.

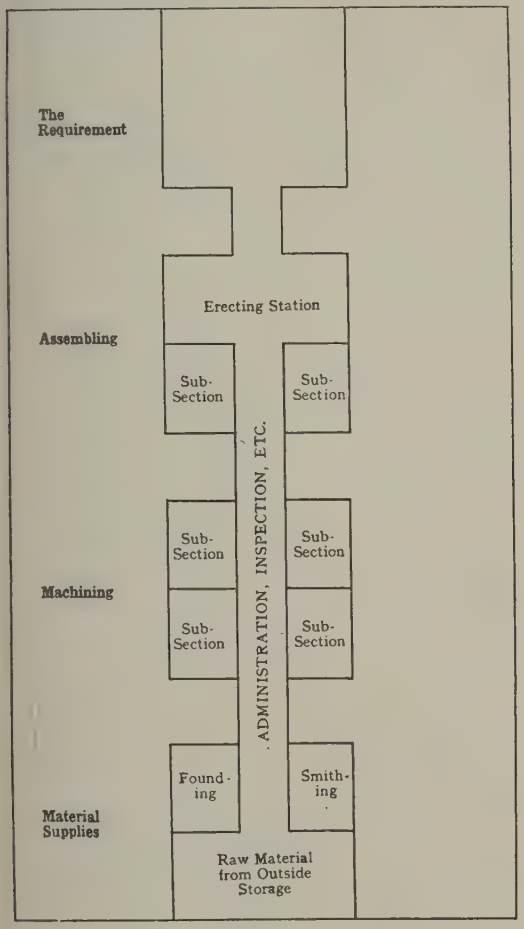



FIG. 8.

Assuming that the whole of the operations mentioned are to be handled in the factory, the lay-out will comprise (*a*) pattern shop, (*b*) foundry, (*c*) smiths' shop, (*d*) machining, (*e*) assembling, and (*f*) storage; and this being agreed upon, the next step is to plan each of these departments with a view to obtaining the maximum results.

It is of no use for the foundry to turn out more castings than can be handled by the machining department; whilst it is equally bad policy for a portion of the machining department to be idle whilst the foundry and the smiths' shop are working at full pressure. Either state of affairs shows at once that something is wrong, and nothing but efficient planning will rectify the trouble.

If the foundry cannot adequately feed the machine shop, or the latter department cannot cope with the output from the foundry, it may be that the introduction of more up-to-date machines will bring about the desired result, but before adopting this expediency it is well to make sure that improvements cannot be effected with the existing equipment, by means of a judicious re-arrangement.

The manager will do well to concentrate upon the defaulting department and satisfy himself that its efficiency is beyond question. It may be that a re-grouping of machines will facilitate matters, or that the entire removal of a section to a different position will yield results. One department may be over-crowded to such an extent as to force the operators to remain inactive whilst the work they have completed is being removed, or it may be that storage facilities are inadequate, causing a delay in the delivery of material to the operator.

There may be excessive handling of material, the material store being at one end of the building and the operator responsible for the first operation at the other, whilst the second operation must be handled in a position equally remote. The gangways may be full of obstructions, so that transit of material from one section to another is impeded, or it may be that one section is too large whilst another is too small.

These matters do not escape observation where whole-hearted attention is bestowed, and the remedy is in many instances equally clear. On the other hand, although the cause is apparent, and the remedy to all intents and purposes equally so, complications are likely to ensue. The gangways could be cleared were there anywhere else to place the material, but the obvious place (by the side of the operator) is already in use and any further crowding would impede *his* progress. It is agreed that the store is in a most inaccessible position, but an attempt to remove it would involve a host of changes, the outcome of which would not be entirely satisfactory.

The manufacturer just commencing business can plan to advantage, assuming that his factory is new and has been built to his specification; but, on the other hand, the manufacturer who commences in a ready-made factory (designed, no doubt, for something entirely different), or the manufacturer who has been long established, and is conscious of his troubles by reason of increasing business or of increasing costs, is not so favourably circumstanced. Still, the trouble is there and must be combated, and if he is a practical business man, and has the determination to "see the

*By permission* *Messrs. Nissens, Ltd.*

A Steel Building, Lined with Galvanized Corrugated Steel, Used as a Machine Tool Shop

thing through," there is no doubt that his ingenuity will come to his aid, and scientific planning will do what is required.

There are endless possibilities in the small factory, and it is not wise to assume at any time that the factory is taxed to the utmost of its capacity. There is always the possibility of getting a bit more out of it, and although in this connection the installation of modern machines, the provision of new tools, and the adoption of new methods of manufacture, must perforce play an important part, it must be remembered that shop planning must precede any of these innovations, in order to get the best results from them.

The effective area of the floor may be considerably increased by judicious planning, and in certain circumstances the open space is more productive than it would be if used to accommodate a machine or a bench. Clear and unobstructed inlets and outlets are of the utmost importance, and if the equipment is grouped and arranged in a systematic manner, the shop is not overcrowded, and each department, section, machine, and operator is permitted that freedom which makes efficiency possible.

### Machining.

The factory engaged in specific machining is laid out and planned in accordance with the need, and the matter here is not so intricate. The machining department, and perhaps a tool-room, will, with the store, comprise the whole lay-out, and planning in this instance resolves itself into the economic development of the one manufacturing department. That department has to cater, not for the needs of other departments, but for the requirements of outside customers, and any proposed alteration may be carried into effect without the arresting thought that another section of the factory may be adversely affected.

Points to be observed in factory planning and lay-out include the following: (1) It is easier to transport small details than heavy work, and the handling of the latter should, therefore, be minimized as much as possible. (2) The productive capacity of associated departments and sections should be equal; that is to say, the maximum output from the foundry and smithy should be handled by the machining department, and the output from the machining department by the assemblers; there being sufficient in each instance to keep all departments at the highest rate of production. Nothing is gained by filling the stores with castings which cannot be taken in hand for machining, or with machined details in excess of the requirements of the assemblers. (3) Bearing in mind that the ground floor is valuable, as it is this upon which rent is paid, space above ground should be utilized wherever possible. The building may consist of a single floor, but adaptations by way of staging and platforms may be brought into existence, for storing purposes or for the handling of light tasks. The ground floor area may be extremely limited, but it is surprising how much relief may be obtained when ingenuity devises inexpensive adaptations. Much, of course, depends upon the type of manufacture concerned, but in most small factories much valuable floor space is to-day occupied by something which does not yield the maximum return, and which could be accommodated elsewhere, thus freeing space for more important purposes. These are points which should engage the attention of the manager in the first instance, and then it is that he can consider improvements by the introduction of modern machinery and appliances.



## CHAPTER V

## PLANT AND EQUIPMENT

It has already been mentioned that, in considering the lay-out of the factory, care must be taken to utilize to the utmost the facilities provided by the floor area, and whilst much depends upon the structure of the building, still more depends upon the proper utilization of the area provided. Many firms, favoured with a large and roomy shop, have failed to achieve half as much as the firm compelled to rent a building constructed for a purpose entirely dissimilar to that now being attempted; the reason being that the latter firm, fully aware of the remoteness of the building to the ideal, nevertheless determined to make the best of the bargain, whilst the former firm failed to appreciate the possibilities of, and the advantages to be derived from the building it had secured, with the result that the advantages did not materialize because the possibilities were not exploited.

In engineering, whether this covers the entire manufacture of a specific product or merely the manufacture of specialized parts upon a repetition basis, the machining department takes pride of place and usually occupies the most commodious portion of the building. It is this department which includes the most expensive part of the factory equipment, and it may be said that, if the machining department is alright, it is comparatively easy to bring the other departments of the factory into line.

Before the machining department can be properly equipped, every detail comprising the assembly must be carefully studied, with a view to ensuring manufacture being handled upon the most economical lines. All drawings must first be prepared, those giving dimensions and also limits, with a view to determining interchangeability, and each detail being considered separately, the analysing of the operations involved will determine the type of machine required.

The material composition of each detail must be considered, both from the standpoint of utility and also from that of economical manufacture, and whilst it is understood that precision machining has transformed the erstwhile fitting shop into an assembly department, this materially increasing output whilst considerably lowering costs, it is not so often appreciated that the application of modern science will also relieve the machining department of responsibility, and incidentally reduce costs in that direction.

If the factory is about to be started up, serious consideration can be given to the possibilities of die-casting and die-pressing, the mission of the one being to eliminate machining and that of the other to minimize it. The successful application of these processes is limited to certain materials, and may, therefore, be (in certain cases) impracticable from the standpoint of utility ; but mention is made of these to emphasize the importance of looking ahead and thoroughly examining the possibilities of any new method, from the point of view of one's own business.

Even if the factory is already equipped, there is no point in the manager persisting on the old lines and deliberately shutting his eyes to the possibilities of any new development. He may contend that he is manufacturing economically, and no doubt, from his point of view, his contention is justified. He is on the right side as long as his competitors take no action, but if they decide to exploit the new idea, the chances are that they will be able to effect economies which will enable them to reduce considerably the selling price of their product, and then he perforce *must* take action, with the disadvantage of being right behind the others.

And apart from specialities similar to those mentioned, which may be said to be in process of development at the present time, there are others established upon a basis more easily recognized by the average works manager. These include such repetition lines as bolts, nuts, washers, pins, etc., and on account of the comparatively small quantity involved, it may be more economical for these to be purchased from outside supplies, rather than to install a machine for the purpose of manufacturing such parts inside the factory.

*By permission* *Messrs. Gillett & Johnston, Croydon*

A Modern Department "Lay-out"

Whilst the machine purchased should be the one most suitable for the specific manufacture, this view should not be carried to extremes, by the small manufacturer at all events. It is a mistake to install highly specialized machines, the range of which is extremely limited, for by so doing a larger plant is required, and the specialized machines will in all probability be idle fairly frequently because there is not sufficient work of the right kind available. It is better to install general utility machines, even though upon these certain operations may take a little longer, for the doing this the number of capstan lathes could be reduced. It is the cheaper proposition to pay a little more for the operation and ensure every machine being fully employed, than it is to have a number of machines in the factory which are only partially employed.

## Installation.

The selection and the purchase of machines having been completed, the question of installation next comes up for review, the best method being for the main shaft to run lengthwise through

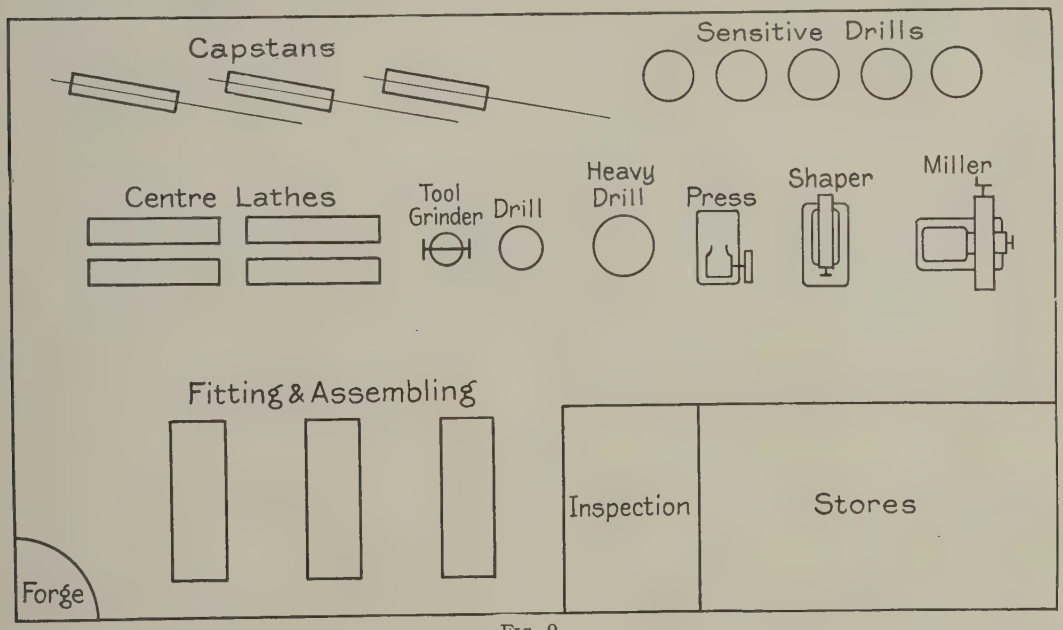



FIG. 9

LAY-OUT AND GROUPING OF EQUIPMENT IN A SMALL FACTORY

range of these is infinitely greater and a smaller equipment will handle the output required.

## Selecting Machines.

In selecting machines, the various methods of machining each component part must be considered, and for each main operation a definite type of machine should be allotted. For example, when the operation is turning, the claims of the capstan and centre lathes must be carefully considered, and if in connection with this operation on one component part a centre lathe is really necessary, whilst the capstan can handle the operation on the other component parts, it would perhaps be advisable to transfer some of the work from the capstan to the centre lathe in order to keep the latter machine fully employed, and by the centre of the building, thus allowing the counter-shafts to be placed on either side. If the main drive is effected by means of an electric motor, the motor can be mounted under the roof close to the main shaft and connected by a silent chain, this allowing the motor to be enclosed and thus protected from dirt and grease. Care must, of course, be taken to see that the enclosing does not prevent the air circulating through the motor, otherwise the effective horse-power is reduced and troubles due to overloading are frequent. The position of the drive in relation to the length of shaft must receive consideration. Where the shaft is about 50 ft. in length, the end is the most suitable position ; but if the length of the shaft is, say, 100 ft. or more, it may be advisable in the interests of economy to place the motor in the

centre, with a clutch on either side, allowing either or both halves to be driven in accordance with the requirement.

The use of roller bearings on the main shaft should be insisted upon, for although the initial cost is somewhat high, this expenditure will be more than justified when the consequent saving in power and maintenance costs are considered.

For the fixing of the counter-shafts it will be found convenient to have double lengths of H-iron reaching from beam to beam, upon which to hang the brackets. This will ensure stability, for the irons can be clamped in any position upon the beams and the brackets affixed in any position upon the irons.

## Transit Facilities.

Whilst on the question of equipment, it may be well to consider the provision of transit facilities so that material may be conveyed to and from the individual machine in the shortest possible time and with a minimum of effort. In the small shop the overhead runway is by far the most expeditious method, and when grouping the machines and rigging up the shafting, provision for a runway should not be overlooked. More will be said of internal transit facilities at a later stage.

## The Millwright.

When once the equipment is installed, it should be taken care of. Many small firms are averse to the employment of a millwright, whom they consider an unnecessary expense, but the best cannot be got from any power installation unless it is kept in good condition. Many manufacturing troubles could be directly traced to inefficient power transmission, but remedies are sought in other directions because the real cause is not recognized, and as a consequence, expense is incurred which does not yield results. The engagement of a qualified millwright will ensure the equipment being always in good condition, and economical manufacture is thereby accelerated.

The foreman of the machining department should never be permitted to repair any breakdown which may occur to the equipment in his department. The activities of the millwright will do much to obviate such breakdowns, but, despite his efforts, trouble will occur at times. It may be that, although trouble in connection with a certain machine is foreseen by the millwright, the exigencies of manufacture will not allow for the time necessary to overhaul the machine, and eventually the breaking point is reached. When this happens, the foreman, instead of attempting to do the job himself, should at once notify the millwright by means of a form similar to Fig. 10,

**BREAKDOWN**

*To*

MILLWRIGHT. DATE_____ TIME_____

DESCRIPTION OR NUMBER_____

IN SECTION_____

WORK STOPPED OWING TO_____

JOB IN HAND_____

REMARKS REGARDING URGENCY_____

SECTION FOREMAN'S SIGNATURE_____

I have examined the above, and will have repairs effected by (*state time*)_____

MILLWRIGHT'S SIGNATURE_____

Particulars of Repairs effected, together with Material or Spares used, to be entered by the Millwright on the back of this Slip, which is then to be sent to the Works Manager.

FIG. 10 (*Front*)

**BREAKDOWN**

*To be Returned, when Completed, to the Works Manager, who will Countersign and send to Cost Office*

REPORT OF REPAIRS

WORK HAS BEEN DONE AS FOLLOWS_____

MATERIAL OR SPARES USED_____

MACHINE RE-STARTED

DATE_____ TIME_____*a.m.* (*p.m.*)

MILLWRIGHT'S SIGNATURE_____

COUNTERSIGNED_____WORKS MANAGER.

FIG. 10 (*Back*)

and this will ensure the repair being effected promptly and economically.

## Belting.

In a machining department belting plays a more important part to-day than formerly, because its direct effect upon power efficiency and manufacture is now more widely recognized. The manager to-day has a very wide choice, and although leather belting is by no means out of the running, it no longer claims a monopoly, for balata and other woven beltings have made a bold bid for popularity. It is of no use for the foreman to swear by leather simply because he has always used leather, any more than it is for him to insist upon balata simply because it is "something new." Each belting has its own specific uses, and it is for the foreman to find out what those uses are in relation to his own manufacture.

The choosing of the right belting is an art which should be developed as much as possible. Many foremen look upon belting as a means of transmitting power, but they do not understand its influence upon efficiency, by accelerating or minimizing wastage of power. The millwright, if he understands his job, should be of the utmost assistance to the foreman in this respect, and if the two co-operate, the shop equipment will always be at the highest pitch of efficiency, which means the maximum output at the minimum of cost.

CHAPTER VI

# ISSUE OF INSTRUCTIONS TO THE MANUFACTURING DEPARTMENTS

THE instructions issued to the manufacturing departments should be clear and concise, yet withal comprehensive. They should not be issued upon the assumption that "the foreman knows," and that it is not necessary therefore to go into detail. On the contrary, anything that can possibly be devised to assist the foreman by reducing (so far as he is concerned) the preliminary work associated with manufacture, should be utilized to the utmost, as it is obvious that the less preparing the foreman has to do, the sooner will he commence actual manufacture, and the more he will be able to produce.

If the foreman is instructed to machine 50 complete sets of details for the standard assemblies, it is quite likely that he knows what to do. He knows just how many details are involved, and what operations are required in connection with each detail. But it is quite obvious that such an instruction would involve the foreman in a mass of clerical work, and some time must elapse before the preliminary work is finished and actual manufacture is commenced. Work cannot be put in hand without written instructions, which must be undertaken by the foreman if other arrangements are not made; and as this is a very uneconomical and unproductive procedure, it is well for the instructions to be issued methodically and in such detail as will obviate the necessity for the foreman to spend a lot of time in preparing for the job.

In the first place, if the factory is engaged upon the manufacture of a specialized assembled product it is known that the assembly is comprised of a certain number of details, known as component parts. Each of these parts is named, the name usually having some bearing upon the function of the part, or devised to fit in with the shape of the part or its description. To further simplify matters, in many factories each part bears a factory number, ranging from 1 upwards.

## Part List.

A general part list (*see* Fig. 11) may be prepared to show how these numbers operate, the list giving the factory number, the recognized name of the part, the quantity per set, and the material from which the part is made. Many factories have adopted this method, but amongst the smaller manufacturers one important item seems to be often missed. This refers to a standard calculation

**GENERAL PART LIST**

| Factory Number | Name of Part | Number per Set | Material | Amount of Material Required | | Part Used for Section Assembly No. |
|---|---|---|---|---|---|---|
| | | | | For 1 Set | For 100 Sets | |
| 101 | Bracket | 1 | Cast Iron | — | — | 5 |
| 102 | Cap | 1 | Cast Iron | — | — | 5 |
| 103 | Bolts | 4 | ⅜ in. Hex. Steel | 14 in. | 117 ft. | 5 |
| 104 | Washer | 4 | 1 in. Rd. M.S. | 1½ in. | 10 ft. 8 in. | 5 |
| 105 | Long Pinion | 1 | 1¼ in. Rd. B.D.S. | 7½ in. | 61 ft. | 8 |
| 106 | Lever | 2 | ⅜ in. Sq. M.S. | 4½ in. | 38 ft. | 3 |
| 107 | Handle | 1 | Brass Casting | — | — | 2 |
| 108 | Support | 2 | Cast Iron | — | — | 2 |

FIG. 11

COMPILED IN DRAWING OFFICE, AND BLUE PRINTS ISSUED TO INTERESTED DEPARTMENTS

of the amount of material required to do the job, which could be easily added to the list. In many factories the foreman is expected to calculate the amount of material he requires, which naturally takes some time to do; yet this time could be saved were a standard calculation made and entered upon the list for reference.

An objection to this may be lodged on the grounds that the number of assemblies required varies—that sometimes 50 sets are put through, sometimes 75, and so on. If assemblies are put through in fairly large numbers, say 350, 400, etc., the calculation could be based upon the requirement for 100, or, if the quantities are small, the calculation could be based upon the requirement for one. Thus, in the first case, the list may show the amount of material required for 100 pieces as 65 ft., and an order for 350 pieces would require $3\frac{1}{2}$ times the amount stated; whilst, in the second case, the list showing $2\frac{3}{4}$ in. as the amount of material required for one piece, the requirement for an order covering 75 pieces could easily be ascertained.

Although each component part is given a factory number, it is not always the case that a drawing is issued for each part. It is contended by the management that every one is so familiar with the product that drawings are unnecessary, but, apart from the obvious rejoinder that the new comer (whether foreman or operator) must be initiated into the mysteries of the product (this taking time and probably involving a good deal of scrapped work), it is a fact that workmanship and production are both adversely affected by the absence of drawings. No matter how familiar the operator may be with the work he has to handle, he cannot be expected to keep to one definite standard, and his variations cause trouble and expense either in assembly or during a subsequent machining operation.

## Drawings.

Economical assembly is absolutely dependent upon precision in machining, and unless the machinist works to a drawing, "extra time," which is totally unproductive, is bound to remain a feature in the assembling shop. A slight variation may mean the use of a file, or the assembly may have to be partially dismantled in order to replace a part with a view to ensuring a more perfect fit. These troubles are often cloaked in the small shop, but they are there nevertheless, and when the management protests at the high cost of assembling, it would do well to look for the reason, when these little troubles would be brought to light.

A drawing should be issued for every component part, no matter how small it may be, the factory number of the part being used as the drawing number. The drawing itself should be quite simple and understandable, it being remembered that the person for whom it is intended is a mechanic, and not a draughtsman. Every dimension should be shown, and over-all dimensions always given, to obviate the necessity for any calculation on the part of the operator. If interchangeable assembling is aimed at, then limits or tolerances should be shown, and if this method is persisted in, improved workmanship will follow, with a consequent reduction of assembling costs and an increase in production.

Whilst the machining drawing is of paramount importance, a drawing for each sub-assembly will be found very useful. This drawing gives a table of all details comprising the assembly, and also shows the parts in position. When young, unskilled labour is constantly being introduced to the work, such a drawing is very helpful, and materially assists in the training of the operator, incidentally taking the place of the foreman to no little extent, and enabling him to more efficiently supervise his department as a whole, instead of devoting the major portion of his time to one or two operators.

The foreman now has drawings for each component part, as well as a part list, which is a big step in the right direction. He has still, however, to issue orders to the operators and requisitions for material, and if he can be relieved from this responsibility, actual manufacture will benefit considerably. The establishment of a small works office will do what is required, and in the small factory one clerk will be sufficient for the need.

## Raw Material Requisitions.

Dealing first with the requisitioning of raw material, we may say that when the matter is left to the foreman it has to await his convenience, and, being a busy man, he cannot afford to start upon any job which is not immediately required. As a consequence, the order for 50 sets of details remains in abeyance until his department is ready for the work, or until the management presses for delivery, when he must needs forsake all else and concentrate upon the task of getting his requisitions placed.

Assuming that the foreman of the machining department is the individual referred to, he must requisition the material he requires from the store, and then perhaps discovers that certain sizes are out of stock and cannot, therefore, be supplied. A rush order upon the purchasing department may bring the material to the factory in the course of a week or so (this naturally causing delay to manufacture), or, if the matter is particularly urgent, the foreman may draw from stores material of a much larger diameter than that specified, and turn this down to suit his requirement.

This delay and expense could be obviated by the automatic requisitioning of material, and, seeing that a standardized basis is given upon the general

part list, there is no necessity for the foreman to devote his time to the task, which can be even more expeditiously and efficiently handled by the clerk. To show how the matter can be handled automatically, it will be necessary to dwell for a moment upon the issue of work orders, in order to illustrate how these, together with the material requisitions, can be issued at one setting.

There should be no need for the foreman to write out orders for the various operations, and yet such orders must be issued, for the guidance of the operator and for the purposes of costing. The provision of a standard operation list (*see* Fig. 12) will enable the clerk to write out the necessary work orders, the duplicate copy of each order being sent to the store as a material requisition. The work order and its duplicate is illustrated by Fig. 13.

**STANDARD OPERATION LIST**

| Factory No. | Name of Part. | OPERATIONS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 101 | Bracket | Mill | Face | Shape | Drill bolt holes | Fit cap | Bore | Drill oil hole | | | |
| 102 | Cap | Mill | Face | Drill bolt holes | | | | | | | |
| 103 | Bolts | Turn and screw | | | | | | | | | |
| 104 | Washer | Turn | | | | | | | | | |
| 105 | Long Pinion | Turn | Screw | Cut teeth | Mill keyway | Drill | | | | | |
| 106 | Lever | Forge | Turn | Drill large hole | Finish turn | Drill small hole | Tap | | | | |
| 107 | Handle | Turn and face | Drill | | | | | | | | |
| 108 | Support | Disc grind | Drill | | | | | | | | |

FIG. 12

**WORK ORDER**

OPERATOR_____ No._____

OPERATION :

FACTORY No._____ ORDER No._____

QUANTITY_____ NAME OF PART_____

JOB COMMENCED (*Time*)_____(*Date*)_____

,, COMPLETED ,, _____ ,, _____

,, INSPECTED ,, _____ ,, _____

,, PASSED TO STORE ,, _____ ,, _____

(Signed)_____FOREMAN.

[1] MATERIAL REQUIRED _____

[1] Amount to be calculated from Standard List and entered by Works Office Clerk.

FIG. 13.

**MATERIAL REQUISITION**

OPERATOR_____ No._____

OPERATION :

FACTORY No._____ ORDER No._____

QUANTITY_____ NAME OF PART_____

MATERIAL DEMANDED (*Time*)_____(*Date*_____

,, ISSUED ,, _____ ,, _____

WEIGHT OF MATERIAL_____

REQUISITION SENT TO COST OFFICE_____

(Signed)_____STORE-KEEPER.

[1] MATERIAL REQUIRED _____

[1] Storekeeper to supply (upon demand) Material as given above.

FIG 13 (*a*).
DUPLICATE OF WORKS ORDER

### Work Orders.

Work orders are made out immediately instructions are received to manufacture a given number of assembled units, but it is recognized that in all probability it is not necessary (or convenient) to commence manufacture forthwith. It is also recognized that the material cannot be kept in the manufacturing department for a lengthy period, but even though the requisitions are sent at once to the store, there is no necessity for the store to issue the material immediately.

When the requisition is received in the store, the stock is checked with a view to ascertaining whether or not there is a sufficiency of material to cover the demand. What material is in the store is at once appropriated for the order, but it is issued only when a specific demand is received; whilst if certain sizes are not in stock, a requisition is at once placed upon the purchasing department. This gives the buyer an opportunity for getting the material into store by the time it is required, and manufacture is not delayed by insufficient supplies.

The work order for the assembling operation should quote the drawing number of the assembly, which enables the foreman to see precisely what component parts are involved. The stores copy likewise quotes this number, and the store-keeper can then issue details in accordance with the drawing, or, if it is decided not to issue drawings to the store, then a standard assembly list, bearing the drawing number of the assembly, and enumerating all the details involved, can be used. This is illustrated by Fig. 14.

If the procedure outlined is followed, it will be found to have a most beneficial effect upon production. The foreman has full instructions, and has no need to waste time in writing out work orders or material requisitions. He knows what he has to do, and he knows also that the work order is awaiting him, and that the necessary material is available. He is thus enabled to plan his work to the best advantage, with a view to getting the maximum output from his department. He can remain in his department to plan and to supervise manufacture, and has no need to waste time in answering the queries of operators, doing clerical work, or making periodical visits to the store to see what material is available.

**ASSEMBLY LIST**

ASSEMBLY DRAWING No._____

FOR SECTION ASSEMBLY No._____

| Factory No. | Name of Part | Quantity per Set | ISSUES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Order No. | Order No. | Order No. | Order No. | Order No. | Order No. | Order No. | Order No. | Order No. |
| | | | | | | | | | | | |

FIG. 14

## CHAPTER VII

## TIME RECORDING AND METHOD OF PAYMENT

IT is generally agreed that some system of time recording must be inaugurated in every factory, no matter how few may be the number of persons employed; this being devised, in the first instance, to ensure the presence in the factory during the number of hours for which the worker receives payment. Thus, if the factory hours are from 8 a.m. to 12.30 p.m., and from 1.30 p.m. to 5.30 p.m., some system must be devised to definitely establish the fact that the man indeed did enter the factory at 8 a.m.; that he did not leave before 12.30 p.m.; that he re-entered the

factory at 1.30 p.m., and that he could not leave before 5.30 p.m. without due notice being taken of the circumstance.

But since the idea of time recording was first put into practice, its scope has been considerably enlarged, for, in addition to its primary purpose, it now holds place as the basis of efficient costing. With manufacture split up into definite sections, and again into specific operations, it is necessary for the exact labour cost of every operation to be ascertained, and this is made possible by extending the scope of time recording.

To-day, the idea is that not only does the man record his entry into the factory, but he also records the time spent upon specific duties, so that every hour spent in the factory during the week is accounted for. The most elementary method in this connection (and one which is favoured in many small factories) may be briefly outlined as follows :

## Check-board.

A check-board is erected near to the works entrance, this bearing a number of hooks, each of which is numbered in consecutive order, according to the number of people employed. Upon each hook is a brass check which also bears the corresponding number to that appearing above the hook, and each operator, when engaged, is given a check number. Upon presenting himself at the factory each day (at 8 a.m. and again at 1.30 p.m.) the operator detaches his check from the hook and deposits it in a box. At the appointed time the works gates are closed, and it is known that the checks still remaining upon the hooks after the gates have been closed, belong to those workers who have not entered the factory.

Each operator has specific duties to perform, and is in possession of a work order which states the nature of the work covered. When this order (which may be in the form of a card) is first received by the operator, he must have the time recorded upon the back, by means of either a clock time recorder or a rubber clock stamp, and when the job is completed the same procedure is followed, the difference between the two markings upon the order denoting the amount of time spent thereon. This, taken in conjunction with the worker's scale of wages, will give the labour cost of the job, e.g. if 3 hours represents the time taken, and the worker's rate is 1s. 3d. per hour, then the cost of the job is 3s. 9d.

The worker does not use his check when leaving the factory, unless overtime is necessary, when he is expected to check off and on, checking off again when making his final departure. The factory gates are opened at 12.30 p.m. and again at 5.30 p.m. to allow the workers to depart, but should one attempt to leave the factory at any other time, he would be challenged by the gate-keeper, who would refuse to allow him to pass the gate unless he held an order signed by the manager.

This, as before mentioned, is quite an elementary method, and is of little use to the firm intent upon analysing the cost of every minute process, for it contains too many loop-holes to work with the accuracy desired. The introduction of bonus and premium bonus schemes makes it necessary for time recording (for the purposes of costing) to be tightened up, so that not only will the work order show the time taken upon one specific operation, but the exact percentage of bonus made by the operator.

## Other Time Recording Systems.

It is not proposed to deal with the more intricate time recording systems, which are in many cases too expensive to merit the serious attention of the small manufacturer, but the system already outlined can be developed considerably, so that it may be of real value from the standpoint of costing. The institution of an automatic time recorder at the works entrance will be found to be more efficient than the check system, for with the latter method too much depends upon the gate-keeper, inasmuch as any operator who succeeds in passing the gate (even though he be some minutes late) is enabled to claim full time.

CLOCK NO._____

NAME_____

WEEK ENDING_____

| DAY | | IN | OUT | TOTAL |
|---|---|---|---|---|
| WED. | *a.m.* | | | |
| | *p.m.* | | | |
| THURS. | *a.m.* | | | |
| | *p.m.* | | | |
| FRI. | *a.m.* | | | |
| | *p.m.* | | | |
| SAT. | *a.m.* | | | |
| | *p.m.* | | | |
| MON. | *a.m.* | | | |
| | *p.m.* | | | |
| TUES. | *a.m.* | | | |
| | *p.m.* | | | |

TOTAL FOR WEEK

CHECKED BY_____

FIG. 15

On the other hand, the closing of the gate, say, one minute before the appointed time will cause resentment, but these troubles are obviated by the use of the time recorder.

If a piece-work or a bonus system of payment is favoured, a separate work card or order is issued for each operation, and upon that work card appears the order number and the time allowance. The operator clocks on the job at the commencement and clocks off when the job is completed, but before he can clock off he must be in possession of another work card, so that the time clocked on this is identical with the clocking off time on the preceding order. In other words, if the operator clocks off, say, order No. 114 at 9.15 a.m., the clocking on time appearing upon the succeeding order must likewise be 9.15 a.m., so that no break appears throughout the week.

The pay clerk receives each week the record of each operator's time, as shown upon the time recorder card (*see* Fig. 15), but in addition he must also receive sufficient work cards (Fig. 16) to show in detail how that time has been spent, and also to enable him to calculate the wages due. The latter position, of course, arises by reason of the piece-work or bonus system in force, and applies only to those operators directly engaged upon production. So far as labourers, helpers, and general workers are concerned, they are paid a day rate, in accordance with the time as shown upon the first card, and no other work cards are therefore necessary in this case.

But with the production worker, the method of

OPERATOR_____ CLOCK No._____

WEEK ENDING_____

JOB No._____

| DAY | ON | OFF | HOURS ON JOB |
|---|---|---|---|
| | | | |

| | No. | At | £ | s. | d. |
|---|---|---|---|---|---|
| HOURS | | | | | |
| OVERTIME | | | | | |
| BONUS | | | | | |
| TOTAL | | | | | |

FIG. 16

**PAY**

FOR WEEK ENDING_____

| Clock No. | NAME | Rate per Hour | Hours to be Paid | Manufacture | Manufacturing Repairs | UPKEEP | | | Non-Productive |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Plant | Tools | Premises and Fixtures | |
| | | | | | | | | | |
| | | | | | | | | | |

WEEK ENDING_____

CLOCK NO._____ OPERATOR_____

RECORD OF WORK COMPLETED AND WAGES EARNED

| Date | Time on | Time off | Actual Hours on Job | Time Allowed | Bonus | Job. No. |
|---|---|---|---|---|---|---|
| | | | | | | |
| TOTAL FOR WEEK | | | | | | |

| | | No. | At | £ | s. | d. |
|---|---|---|---|---|---|---|
| | Actual hours worked | | | | | |
| RECEIVED | Bonus | | | | | |
| Signed_____ | Extra for overtime | | | | | |
| | Total Wages Earned | | | | | |
| | Less Insurance | | | | | |
| | WAGES DUE | | | | | |

FIG. 17

calculating the wages due is entirely different. He gets a time allowance for every job he handles, and although his time card shows 48 hours, the work cards completed by that operator may show that, during those 48 hours, he has handled work which entitles him to 60 hours' pay.

The work orders, therefore, determine the amount of wages to be paid, and as each card is received, particulars are entered by the pay clerk upon a card (*see* Fig. 17). This, when completed, shows the actual number of hours worked by the operator, the amount of bonus earned, and the total wages due to him. The works week usually ends a day or two prior to the pay-day, that is to say, if wages are paid on Friday evening, only completed work cards received by 5.30 p.m. on the Wednesday previous will be included, those completed on the following day (Thursday) being paid for at the end of the following week. This is necessary to enable the pay clerk to compile his records, so that payment may be made without delay on Friday evening.

Before payment is made, the card referred to (Fig. 17) is handed to the operator, who is thus able to see what wages are due to him, and to raise a query should any item be in dispute. Assuming all to be in order, he signs the card, and hands this back to the pay clerk when he receives his wages.

## Payment of Wages.

The wages may be placed in envelopes, bearing the operator's name and number, or in small tins

**ROLL**

No._____

| Productive Hours | Total | Deductions | | | | Total | Net Wages Paid | Employer's Contributions | | Number of Weeks Continuously Employed |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Insurance | | | | | | Health | Unemployt. | |
| | | Rate | | Stoppages | | | | | | |
| | | Health | Unempt. | Health | Unemployt. | | | | | |
| | | | | | | | | | | |

FIG. 18

bearing the number of the operator. It is well for wages to be paid expeditiously, and with this end in view the operators line up in consecutive order, according to their respective clock numbers, present the card and, upon receiving their wages, file out of the factory. If a fairly large number of people are employed, it may be well for the pay clerk to have an assistant, who takes the card from the operator and calls out the number, the pay clerk thereupon handing the envelope or the tin to the operator in front of him. In this way it is possible to pay several hundred people in a few minutes.

The work of the pay clerk is not finished with the payment of wages, for he has to dissect those wages, to enable the costing department to apportion the various charges. A dissection sheet, similar to Fig. 18, is filled in, this giving the costing department the particulars desired. All work orders, when dealt with by the pay clerk, are passed to the cost office for recording.

A time recording system such as the one outlined has been found to be quite efficient and at the same time inexpensive. It is not scientific, in the strict sense of the term, but it is quite effective. One man can handle the whole matter in the comparatively small factory, and may, in addition, undertake other duties beside. Usually, however, he is wholly concerned with time recording and payment of wages, and it may be considered desirable in some factories to still further enlarge the scope of the time and wages department. As an example, the arrival of members of the staff may be recorded, although these people do not actually record their arrival, and again, a lost time statement may be circulated weekly through every department, with a view to bringing the names of habitual late comers to the notice of their foreman.

The scope of the department is dependent upon the system operating in the factory, and particularly that part of the system which deals with wages. If only day rate is paid to all operators, then time recording is a simple proposition, the only point at issue being the time of the operators' arrival. If, on the other hand, piecework or bonus systems are favoured, then the time and wages department must needs be developed to cater for the extra requirement.

## CHAPTER VIII

## TOOLS FOR MANUFACTURING PURPOSES

When the manager is satisfied that, with the present methods of manufacture, the factory plant and equipment is being worked to its utmost capacity, this does not mean that the output figure must perforce remain stationary. The result he has achieved may testify to his ability as a planner in respect to the factory lay-out, but having achieved so much he must still press forward, in order to maintain his progressive reputation, and seek, by means of mechanical ingenuity, to display further prowess.

He must not be content, at this step, to rest upon his laurels, for much remains to be done. However much he has accomplished, he must not be satisfied, and the doctrine of "leaving well alone" must not be followed when he knows that "well" can be made "better." The factory, as a paying proposition, may have exceeded expectations, but it must be remembered that the improvements effected have been accomplished by expense, and that it is now time for the development of further improvements in connection with which the item of expense is not so prominent.

In other words, he is out to reduce his manufacturing costs, and this can be accomplished only with a further increase of output. As a definite yield is made by the present methods of manufacture, it follows that further improvements can only follow a change in some (or all) of those methods, which is made possible by a display of mechanical ingenuity, culminating in the provision of up-to-date and effective tools.

### Tool-rooms.

The chief productive department in the factory should be the tool-room, and yet it is often regarded as an expense, which indeed it is if not properly developed and thoroughly exploited. No matter how many tools may be in existence, there is always room for more, and the reason why the scope of the tool-room is so restricted in many factories is that manufacturing methods remain unchanged, and the provision of further tools for use in connection with these is deprecated by the management on the score of expense.

The idea of using the tool-room as a forcing department, and not merely as an accessory, can well be exploited in the small factory, and a distinct change in the method of manufacture, suggested by the devising of an ingenious tool, will reduce manufacturing costs considerably. Two examples of what can be done in this direction may be cited, and speak for themselves—

(1) *Original Method*—

| | |
|---|---|
| Bend (by hand) Time (per 1,000) . | 83 hrs. 20 mins. |

*New Method*—

| | |
|---|---|
| Bend (in press) „ ( „ ) . | 3 hrs. — |
| Time saved (per 1,000) . | 80 hrs. 20 mins. |

Cost of tool, £20.

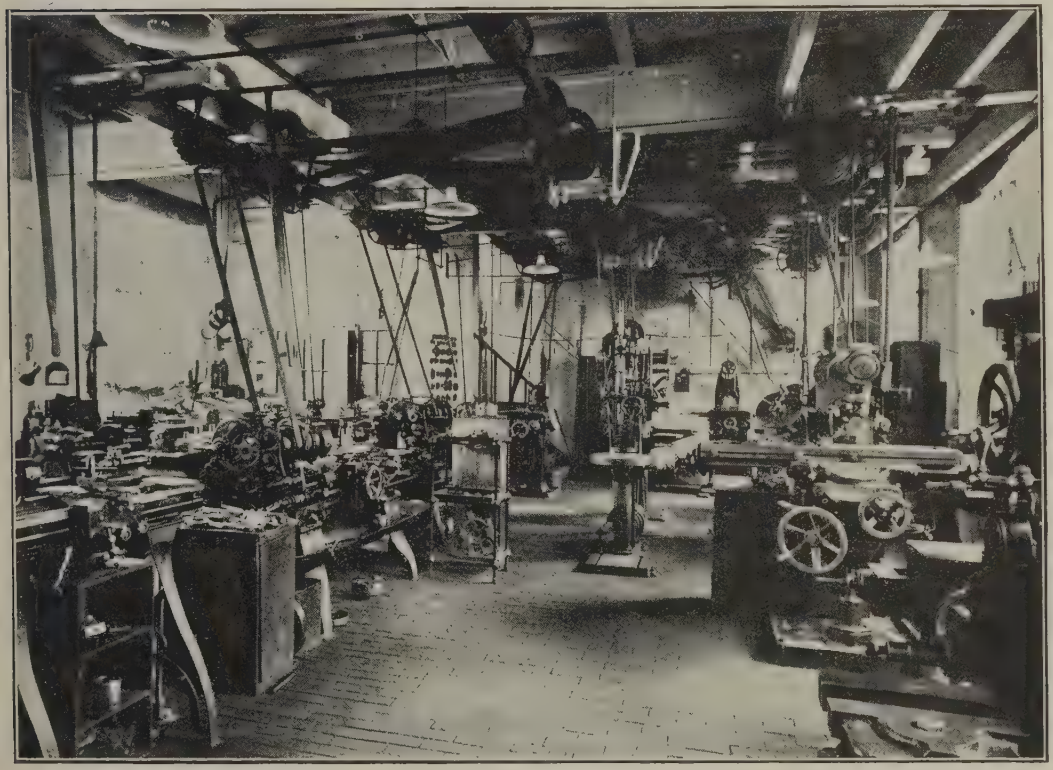
(2) *Original Method*—

| | |
|---|---|
| Bend (blacksmith) Time (per 1,000) | 100 hrs. |
| File and fit to jig „ ( „ ) | 150 hrs. |
| Total time per 1,000 . . | 250 hrs. |
| *New Method*— | |
| Bend (in press) Time (per 1,000) . | 3 hrs. |
| Time saved (per 1,000) . | 247 hrs. |

Cost of tool, £67.

up the manufacture of other component parts, resulting in an increased factory output.

The tool designing in a small factory would probably be in the hands of the works manager, who, thoroughly acquainted with every detail of the manufacture handled, would be in a position to recognize its requirements. He would concentrate upon that manufacturing section which appeared to be experiencing difficulty in discharging its commitments, and endeavour to give it



*By permission* *Messrs. Gillett & Johnston, Croydon*

A Tool Department

The press was in existence, working only part time. Further, in connection with (2), the wage rate of the blacksmith was 2s. per hour, whilst that of the press operator was 9d. per hour, and, in addition, one operation, taking 150 hours at 9d. per hour, was entirely dispensed with.

As may be inferred, it was not possible, under the old method, to put 1,000 parts in process at any one time, neither was it at that time necessary. But when it was found that output in this connection *could* be increased by changing the method of manufacture, this acted as an incentive in other directions; tools were designed for speeding relief either by designing tools which would quicken production in that section or by tapping the undeveloped resources of another section, as in the examples already given.

A record of all tools already in existence is necessary, and compiled in such a way as to definitely associate the tool with the operation. A small card record, similar to Fig. 19, will be found quite suitable, this showing all tools used in connection with the component part, and the date upon which each was issued. Further, tools should not be allowed to lie about the various sections and departments when not in use, but

NAME ___*Lever*___ COMPONENT PART No. 1721.

| No. | DESCRIPTION | OPERATION No. | ISSUED | | | |
|---|---|---|---|---|---|---|
| J 1 | Drill Jig for Spring Holes | 3 | 10/5/21 | | | |
| F 2 | Tapping Fixture | 4 | 10/5/21 | | | |
| F 3 | Fixture for Turning Bosses | 2 | 21/5/21 | | | |
| J 4 | Drill Jig for Main Holes | 1 | 6/6/21 | 8/3/22 | | |

FIG. 19

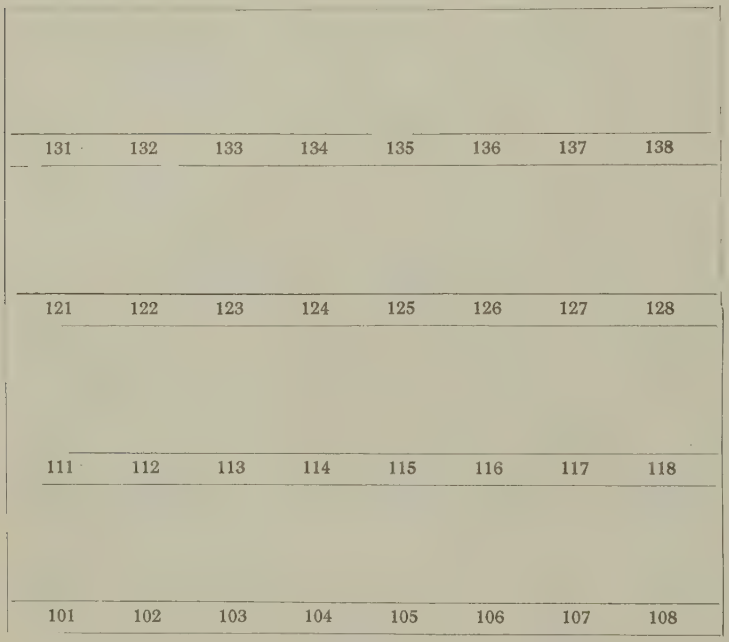
**TOOL CHECK CARD**

OPERATOR'S NUMBER } _____

Eight checks bearing the above number have been handed to (*Name*)_____for the purpose of obtaining tools on loan. He is responsible for their safe custody, and agrees to return the same to the Tool Store upon ceasing to be employed by the Company.

| Received checks in accordance with the above. | Checks returned in accordance with the above. |
|---|---|
| *Operator's Signature* _____ | *Tool Storekeeper's Signature* } _____ |
| *Date* _____ | *Date* _____ |

FIG. 21




STORAGE OF JIGS AND PRESS TOOLS FOR SPECIFIC COMPONENT

FIG. 20

should be housed in a tool store, no matter how small a place may be available. Fig. 20 gives an idea of a simple storage system which may be quite suitable for the small factory, where the number of tools is not extensive and the variety is limited.

If the factory is large enough to warrant the engagement of a tool storekeeper, the distribution of tools may be governed by means of brass checks. Each operator signs for a number of these, upon a card similar to Fig. 21, which is kept in the tool store. When the operator leaves the service of the firm, the checks are returned to the storekeeper and all tools cleared, the card then being signed by the storekeeper in the manner shown.

Another method, which may commend itself to the small manufacturer on the score of simplicity, may be briefly described as follows. The tool store adjoins the material issuing store, and when the job is about to be put in hand, the operator's work order is received in the store, and the necessary material issued, together with what jig, tool, or gauge is required, the latter provision being controlled by reference to the card record showing

**TOOL MATERIAL STOCK RECORD**

DESCRIPTION_____ CLASSIFICATION NUMBER_____

| ON ORDER | | | | | RECEIPTS, ISSUES, AND AVAILABLE STOCK | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Amount | Urged | Promised | Received | Date | Amount Received | Amount Issued | Stock | Date | Amount Received | Amount Issued | Stock |
| | | | | | | | | | | | | |

FIG. 22

the tools associated with any specific component part. When the operation has been completed, the parts are returned to the store, but must be accompained by the tool, which is placed in its correct position in the tool store. The storekeeper, before accepting the parts, must see that the tool is returned, and refuse to sign any work order until this condition is complied with.

This method obviates the necessity of introducing a check system, neither is the presence of a tool storekeeper essential. It is a real time-saver, for but one journey is necessary to get both the material and the tool, and although most organized factories favour a method somewhat more elaborate, this will be found quite satisfactory to the small manufacturer, who desires system of the most simple form.

The stock of materials held for tool purposes should be classified and a record made of all receipts and issues. The classification may take the form of a number, it being understood that No. T100 represents a certain size and class of steel, for use for a given purpose. This record is illustrated by Fig. 22. Requisitions for tools or material for tools should in all cases be signed by the works manager (*see* Fig. 23).

**REQUISITION FOR TOOLS AND TOOL MATERIAL**

No. _____

DATE _____

TO STOREKEEPER

PLEASE SUPPLY THE FOLLOWING

FOR ORDER _____

AMOUNT _____

DESCRIPTION _____

CLASSIFICATION NO. _____

(Signed) _____
*Works Manager.*

SUPPLIED

AMOUNT_____ WEIGHT _____

RECEIVED BY _____

STOREKEEPER SIGN _____

AND PASS REQUISITION TO COST OFFICE.

FIG. 23

## Orders for Tools.

A comprehensive form used in connection with tool orders is illustrated by Fig. 24, this being used for a variety of purposes, including the following: (*a*) Making new tools, (*b*) repairing tools, (*c*) replacing, (*d*) inspecting, (*e*) grinding, (*f*) delivering from stock, etc. This is made out by the works manager, when dealing with (*a*), (*c*), and (*f*), but in other cases the order may be signed by a responsible foreman.

The number appearing at the top of this form must appear upon all work orders and material requisitions issued in connection with the work, and when the job has been completed the form

is signed by the foreman responsible for the work, and also by the foreman receiving the same, after which it is sent to the cost office. It will be observed that the form may also be used as an

No. _____

**ORDER FOR TOOLS**

| | Quantity | Particulars |
|---|---|---|
| Make . . . | | |
| Repair . . . | | |
| Replace . . . | | |
| Inspect . . . | | |
| Grind . . . | | |
| Deliver . . . | | |
| Millwright . . | | |

| | |
|---|---|
| In accordance with | Order given by _____ *Date* _____ |
| Drawing_____ | ,, recv'd by_____ *Date* _____ |
| Pattern_____ | Work completed____ *Date* _____ |
| Sketch_____ | ,, recv'd by_____ *Date* _____ |
| Agreement____ | Order passed to Cost Office |
| | *Date* _____ |

Fig. 24

order to the millwright, in connection with repairs to plant and equipment.

Where the tool is used in connection with heavy work, it is wise to have it inspected before being returned to store, as otherwise, when next taken out, it may have to be sent to the tool-room for repair or adjustment, thus causing a delay in production. If the tool is used only for light work, however, this precaution is perhaps not necessary, but even if this be the case, there should be a periodical inspection of all tools, in order to guard against any contingency which may arise.

The art of managing a tool-room is in treating it as a productive department, and making it a paying proposition. It is not good business to take the aggregate expenditure incurred by this department and treat it as entirely non-productive, for that expenditure is incurred for the purpose of facilitating manufacture and reducing manufacturing costs. The net value (from the standpoint of manufacture) of every tool made should be ascertained, and when this is done, a cheese-paring policy in the tool-room, with a view to keeping expenses down to a minimum, will not be persisted in. Many firms will only employ tool makers in proportion to the number of operators engaged upon production, and if the latter number 50, it is considered that two tool makers will adequately cater for their needs.

The result is that production suffers owing to lack of enterprise in devising new tools, and thus improving methods of manufacture; whilst it also suffers on account of the many little tool-making jobs handled *sub rosa* in the manufacturing departments, for it may be taken for granted that if the tool-room cannot satisfy the requirements of the production operator, the latter will take the matter into his own hands, and hold up production whilst making (or repairing) a tool for his own use.

It is the effectiveness of the tool department

No. ___1861 ___

**DAILY LIST OF GOODS RECEIVED**

Date____*29th September*, 1922_____

| G.R. Note No. | Received from: | Weight Cwt. | Qrs. | Lbs. | Quantity | Description | Carriage Paid on (if any) | Package Mark or No. | Invoice passed by | Date of Invoice |
|---|---|---|---|---|---|---|---|---|---|---|
| 10663 | *James & Co., Birmingham* . | | | | 25 *doz.* | *Screwdrivers* | — | 4565 | *J.C.* | 30/9/22 |
| 10664 | *Blank, Ltd., Hull* . | | | | 1 | *parcel* | — | — | *J.C.* | 2/10/22 |
| 10665 | *Local* . . . | | | | 6 | ½ *Gas Dies* | *Cash (paid)* | — | *J.C.* | 29/9/22 |
| 10666 | *South & Co.* . . | | | 6 | | *Beeswax* | *Cash (paid)* | — | *J.C.* | 29/9/22 |
| 10667 | *Blankshire Factory* | | | | 2 | *Patterns No.* 520 | *(own)* | — | *J.C.* | 29/9/22 |
| 10668 | *Mobbs & Co., London* . . | | 2 | 7 | 17 *sheets* | *Steel* | | 933 | | |

Fig. 25.

which counts, and if the costing is handled in an efficient manner, to show precisely what is being handled by the tool-room, and the productive value of every tool produced, the result will satisfy the management and the tool-room will justify its existence.

## CHAPTER IX

## GOODS RECEIVED FROM OUTSIDE SUPPLIERS

No matter how small the factory may be, it is absolutely essential for all goods entering the factory to be recorded, and a daily Inwards List, similar to Fig. 25, should be compiled by the gate-keeper and handed to the people concerned. In some factories this is kept up only to a limited extent, and the exceptions are so numerous that the list is of little value. It must be remembered that when exceptions are made these are likely to be encroached upon, and the consequence is that many of the things which are not in the ordinary course of events excepted are not recorded, and then trouble ensues.

For example, certain officials may leave the factory at times for the purpose of making a purchase and return with the goods in their possession. The gate-keeper has no authority to challenge these people, who, in turn, do not think it worth while to acquaint the gate-keeper with the nature of their purchase, seeing that it is a cash transaction, and the entry of the goods into the factory is not recorded. In another case, a customer may bring work into the factory, taking this straight to the foreman responsible for the job, but at a later date the receipt of this work is doubted as it cannot be remembered, and no official record having been made, a very undesirable state of affairs exists.

To overcome this, the gate-keeper must be instructed to record every receipt upon the daily Inwards List, and interested people must make the fullest use of this list, which is a most valuable document. The goods received into the factory may be classified as follows, viz. : (1) Chargeable, which may be subdivided thus, (*a*) credit account, and (*b*) cash transaction; (2) non-chargeable, which include circulars, samples, etc.; (3) customers' parts for repair; and (4) returns, such as the firm's own patterns, packing cases, etc.

The gate-keeper is not expected to enter in detail all particulars of the goods received, a brief description of the package and its contents, together with the name of the sender, etc., being all that is required. For example, goods may be received as follows, viz. : (*a*) A package containing bolts, (*b*) 10 drums of oil, (*c*) a quantity of loose castings, (*d*) two casks containing various small castings, (*e*) various loose patterns, and so on, and, in the case of goods enclosed in a package, the precise contents can only be ascertained when the package is opened, which would be done by the receiving store-keeper. The exact quantity of each type of loose casting would appear upon the Inwards List, and also a precise description of loose patterns; whilst a record of the number of drums of oil received would be all that is necessary in that connection.

### Passing of Invoices.

As regards the credit account, the invoice is passed for payment only after it has been ascertained that the goods enumerated thereon have been actually received and accepted into stock. Precise particulars of the goods received are given to the purchasing department by the receiving store-keeper, and before the invoice is passed the item on the Goods Inwards List is initialed by the purchasing clerk, and the necessary entries made as shown in the example. These entries include the serial number of the goods received note (as received from the store-keeper) and the date of the invoice, and a valuable record is instituted which can be referred to in the case of any dispute arising later.

When the entry refers to a cash transaction, it may be passed on sight, unless the expenditure involved necessitates a definite charge against one specific branch of the organization (as, for example, the purchase of a certain tool), in which case a notification must be sent to the cost office. Non-chargeable entries are passed on sight, and entries relating to the receipt of customers' repairs or the return of patterns or packing cases may be passed upon receipt of the goods received note.

A periodical checking of all incompleted Goods Inwards Lists should be instituted, so that no item is outstanding for a lengthy period. Some suppliers are notoriously slow in sending in their invoices, and it is wise to make all settlements as early as possible. The lists are filed in consecutive order, which means that they are also in date order, and when every entry has been passed the list is initialed in the bottom right-hand corner, so that the fact may be ascertained without reference to the items in detail. If an initial does not appear in the position mentioned, it is known that the list has not been cleared, and a perusal will quickly bring the outstanding item to the front, where it can be dealt with.

Whilst on the subject of goods received into the factory, it may be well to follow the invoice after it has been passed for payment by the purchasing office. No matter upon what basis the account may be (whether eight days, one month, or even longer), the invoice should be cleared by the purchasing office at the earliest possible moment. This is not always appreciated, and because the terms of settlement are somewhat extended, the purchasing clerk is often disposed to retain the

Pneumatic Riveting Machines

**INVOICE REGISTER FOR OUTSIDE PURCHASES**

| Consecutive Number | Name of Firm | Address of Firm | Date of Invoice | Amount | | | Terms | Credits | Date Paid | Ledger Folio |
|---|---|---|---|---|---|---|---|---|---|---|
| 101 | *E. Shook & Co.* | *Blank Street, Manchester* | 7/10/22 | 6 | 15 | 4 | 2½% *Monthly* | — | 30/10/22 | 48 |
| 102 | *Mobbs & Co.* | *London* | 8/10/22 | | 15 | 8 | *Nett* | *Returned Package, 2/–* | 30/10/22 | 51 |
| 103 | | | | | | | | | | |

FIG. 26

E. SHOOK & CO., MANCHESTER

2½% Monthly. ACCOUNT ___48 ____

| Date | Debits | F.O. | *Dr.* | | | Date | Particulars | Mns. No. | *Cr.* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30/10/22 | To Cash . . | 1861 | 6 | 15 | 4 | 29/9/22 | By Goods . . | 106 | 6 | 15 | 4 |

FIG. 27

invoice as long as possible, which does him not the slightest good and is quite unbusinesslike.

Before passing the invoice, however, the question of credits must be satisfactorily settled, and there must be no likelihood of any dispute arising at a subsequent date. If it is a monthly account, the supplier must be written to for all outstanding credit notes, and the invoice must not be passed for payment until these have been received.

## Invoice Register.

Once the invoice has left the purchasing clerk, no further interest need be evinced by this individual, for if he has done his duty in a proper manner payment can be made without comment. Each invoice, when received in the general office from the outside supplier, is given a consecutive number, this number appearing upon the invoice, and brief particulars recorded in an Invoice Register (Fig. 26). This register enables the cashier to see at a glance any outstanding account, whilst it also permits the book-keeper to check any tendency on the part of the purchasing clerk to retain an invoice because the terms of payment are somewhat extended. All outstanding invoices are clearly shown, and as this is known to the purchasing clerk, he will pass through every invoice with the least possible delay. When an invoice is received in the general office from the purchasing clerk, the register is marked to denote the fact, and the account is then posted to the ledger (*see* Fig. 27), the invoice being kept on file until payment is due. When the account is receipted it is filed in the general office according to the month (*see* Fig. 28).

**PURCHASING INVOICES ON FILE**

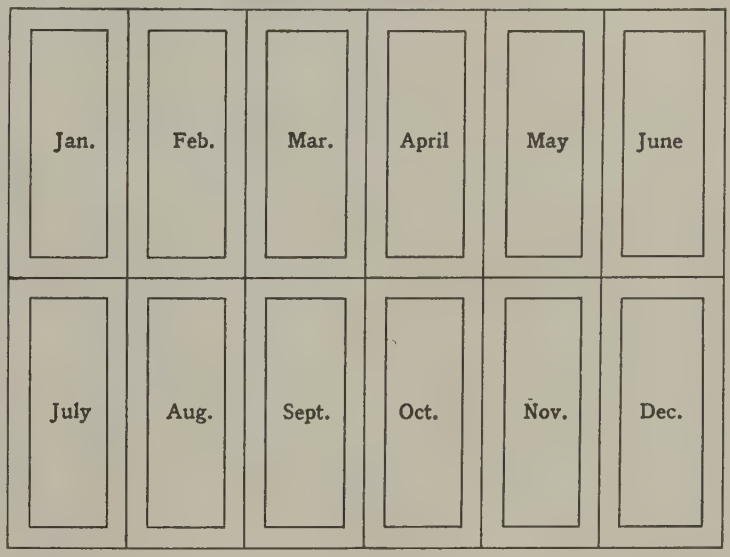



FIG. 28

## Unloading and Transporting.

When material is received from outside sources, a good deal of manual labour is involved in unloading and transporting to the factory store, due to the absence of mechanical aids. Where possible, a chain hoist should be installed near the factory entrance, and if an overhead runway is not permissible, on account of the structure of the building, it should be possible to devise an expeditious method of floor locomotion. This may be considered an expensive matter by the small manufacturer, but if he will but calculate the cost of the manual labour involved in transporting material without mechanical appliances, he will soon come to the conclusion that the initial outlay in providing transit facilities will be small in comparison with the amount saved in labourers' wages.

A Goods Transporter

It is an easy matter to devise a simple system quite suited to the needs of the factory. The carman, in his hurry to unload, insists upon the material being dumped down in the nearest available space, for he cannot afford to wait whilst men make a dozen or so journeys into the factory in order to place the material in the store. This means double handling and heavy costs, apart from the damage to the material, and the risk of accident due to the material lying for a time in a frequently traversed space.

Material should be received into the factory quickly, and with a minimum of handling. There is, perhaps, but one entrance, and at certain periods during the day two or more carmen arrive almost simultaneously with consignments to deliver. As only one can effect an entry at one time, the others must perforce wait until he has unloaded, and if this is a protracted proceeding a good deal of delay is occasioned. The small manufacturer often complains of the lack of attention accorded him by the railway companies, but in many cases he himself is to blame, for the carmen are not disposed to exert themselves and effect prompt deliveries to the factory when unloading is protracted by reason of the antiquated methods of handling, and they deliver here only when convenient to themselves.

## Checking of Material.

Immediately it is received, all material should be counted or weighed, and the amount entered upon a goods received note, which is later checked against the invoice. This should be handled by a competent man whose figures can be accepted as reliable. Much trouble and annoyance is caused when, after a complaint has been sent to the supplier relating to a shortage, it is found that the checker has made an error, and that the receipt is in accordance with the amount shown upon the invoice. Until the man has been proved competent, it is well for the purchasing clerk, before acting upon information received, to personally verify the figures given, and when it is known that this procedure

is followed, the supplier will usually accept the statement made and either send on the missing material or issue a credit note to cover the shortage.

### Inspection.

If possible, all material should be inspected before being accepted into stock, and although for certain classes of manufacture this is not considered necessary, the material should at least be overlooked, so that breakages and other defects are noted. This is particularly important in regard to iron castings, which are liable to fracture, and also in regard to sheet metal and steel bar, the trouble in respect to the former being scratches and damaged edges, which may cause a good deal of scrap; whilst bar steel may be covered with rust, or have dents which quite spoil the material for its intended purpose.

It is impossible for manufacture to proceed upon economical lines if the receipt of material into the factory is not handled in a proper manner. As before mentioned, there need be no elaborate system and no expensive facilities—all that is wanted is common sense, so that receipts are handled expeditiously and accurately recorded, and that the quality of the material is at least consistent with the price paid for it.

CHAPTER X

## ISSUE OF MATERIAL FROM THE STORE

Material for manufacturing purposes should be kept in a store and all receipts and issues controlled by a competent man. In some factories storage facilities are extremely limited, and a certain amount of material (especially the bar variety) is racked in the various manufacturing sections, being used just as required, with no regulation and no record of what has been taken away. This is a mistake, for efficient costing is impossible in such circumstances, and, no matter what may be the size of the factory, the storage of material under responsible control must be insisted upon.

Electrically-operated Truck

But even though a recognized material store be in existence, very little headway is made if every foreman and charge-hand can demand and receive whatever he desires, if such a demand cannot be challenged and verified. It is obviously not in the interests of economical production for every requisition for material to be challenged and held back pending an investigation, nor yet for arguments between the foreman and the store-keeper to be of frequent occurrence; and so the system must be devised to render the requisitioning and

issuing of material a more or less automatic process, in order that the demand may be met with a minimum of trouble and delay.

The demand, no matter in what form it is presented, should be so definitely identified with the job as to leave no room for argument, and as each job is covered by a specific manufacturing order number, this number must hold a prominent position upon the requisition. It has to be remembered that the value of the material supplied must be charged against the job, and accuracy in this connection is only possible when the correct order number is given. The person responsible for the compiling of the requisition must be impressed with the importance of this, in order to avoid (1) delay in the issue of material, and (2) trouble at a subsequent date in connection with costing.

But a works manufacturing order may cover quite a variety of details, each of which requires a different size or class of material, and when placing the requisition, care must be taken to ensure the material requisitioned being identified with the detail for which it is intended. As each detail is given a drawing number, or a factory number, this must appear upon the requisition, and accuracy here is as essential as in connection with the order number. One other factor may also be mentioned, viz. the correct amount of material being stated, as, if there is an excess, this probably means waste and, consequently, heavy charges; whilst if insufficient material is issued, this may cause delay and expense in manufacture.

It is generally recognized that errors are too often associated with the clerical efforts of the factory officials, and especially when these individuals have other duties to perform, as in the case of a department foreman—it is wise, therefore, to limit the clerical activities of these people as much as possible by instituting an automatic method of issuing material by means of standardized forms and charts. This principle has already been outlined and illustrations of forms and assembling lists shown, but here we may briefly show the procedure of various methods and what advantages may be derived from them, apart from affording relief to the foreman.

## Raw Material.

Raw material from the store may be classified as follows, viz. that material which has already been formed to some semblance of the detail for which it is intended, and issued out in numbers, such as castings, forgings, drop stampings, etc; and the material known as common stock, which can be utilized for a variety of purposes, and which is issued out by weight, such as steel and brass bar, sheet metal, etc. In requisitioning the first named, the number required is specified, and the name of the detail quoted, but when requisitioning steel bars, etc., the length of bar required must be specified, the weight of this requirement being ascertained by the store-keeper for costing purposes.

## Requisitions.

A requisition for material to be issued upon demand is illustrated by Fig. 29, and one for deferred delivery illustrated by Fig. 30. In the

**REQUISITION FOR MATERIAL**

MANFG. ORDER NO. _____

*Date* _____

MATERIAL FOR _____ DRAWING NO. _____

| Office Ref. | Quan. or Weight. | Description. | Server to fill in: Cwt. | Qrs. | Lbs. | Rate @ | per | Value £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Requisitioned by _____ *Foreman.*

_____ DEPT.

Material as above received by

(Sgd.) _____

Served by _____

FIG. 29

**REQUISITION**

TO GENERAL STORE

FROM _____ DEPT. *Date* _____ 19__

Please deliver Material as under for:

ORDER NO. _____

| Quantity | Description | For Drawing No. | Name of Part | Weight | Price: @ | per | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

DELIVERY REQUIRED BY _____

(Signed) _____

*Note.*—This Requisition must be signed by a responsible official.

FIG. 30

first case the labourer receives the material upon demand and signs the requisition accordingly, the requisition being made out in duplicate, one copy being brought back to the department, and the other retained by the store for posting purposes, afterwards being sent to the cost office. In the second case, the requisition (also made out in duplicate) is deposited in the store, and when the material is supplied it is accompanied to the manufacturing department by a Material Issue Note (*see* Fig. 31). This is made out in duplicate,

**MATERIAL ISSUED FOR PROCESS**

ORDER No. _____

| FOR DRAWING NUMBER _____ | DATE OF ISSUE _____ | MATERIAL HANDED OUT BY _____ |
|---|---|---|

| Quantity. | Description. | Checked and Received by : |
|---|---|---|
| | | |

FIG. 31

both copies being signed by the person receiving the material. One note is retained in the department, and the other returned to the store.

When the material has been supplied, one copy of the requisition is used for posting the stock records, and afterwards retained in the store for reference, whilst the other copy is sent to the cost office.

## Return Note.

In some cases it happens that more material is issued than is actually required, e.g. the job may be cut or stamped from sheet metal, and as whole sheets are always supplied, it may be that, say, half a sheet must be returned. When excess raw material is returned to store, it is accompanied by a Return Note (*see* Fig. 32), so that the department

**RAW MATERIAL RETURNED TO STORE**

ORDER No. ____

FROM _____ DEPT. *Date* _____

| Amount. | Description. | Weight. | *Ex* Drwg. No. | Recvd. by : |
|---|---|---|---|---|
| | | | | |

FIG. 32

concerned may be credited with the amount returned. When the return is due to the spoiling of material for the specific job, the form illustrated by Fig. 33 is used, and if the material can be rectified or used in connection with other work this is stated upon the note, a copy of which is sent to the cost office.

## Specification List.

In the factory where specification lists are used to cover all details required in connection with a specific order, the amount of raw material necessary for the job is stated, and a foreman's requisition giving detailed particulars is not required by the store-keeper. If specification lists are issued for comparatively small numbers of sets, the work covered is usually upon a rapid movement basis, and the receipt of the list is regarded as the store-keeper's authority to issue the whole of the material covered, and this he does without waiting for a notification from the shops.

But when larger quantities of parts are involved, although these are covered by a specification list in the manner just described, the procedure in regard to the issue of material from the store differs from the foregoing. In this case a notification must be received from the manufacturing department concerned before the store-keeper will issue material, as, assuming that the order covers the manufacture of, say, 500 assembled units, it is obviously impossible for any manufacturing department to receive and hold the whole of the material involved.

Upon receipt of such a specification list, therefore, the store-keeper first satisfies himself that he has sufficient material to meet the demand, requisitioning the purchasing department for any material which he cannot supply. Having done this, he issues only such material as is specifically demanded by the foreman of a manufacturing department, this demand being couched in the simplest possible form, merely asking for material to be supplied "in accordance with item No. . . . Specification List No. . . ."

Particulars regarding the amount or size of the material appear upon the specification list, and are not, therefore, enumerated upon the demand. This method saves a good deal of clerical labour in the shops, and also ensures the predetermined quantity of material being supplied, which makes subsequent costing a simple proposition. If, after the prescribed amount of material has been supplied, still more is required, the foreman of the department concerned may requisition this, but he must state upon his requisition why this extra material is required. The specification list is compiled from data supplied by the draughtsman, and it may be taken for granted that the quantity of material he authorizes is quite sufficient for the purpose. Any shortage, therefore, must be due to shop troubles (scrapped material, etc.); but,

whatever the trouble is, it must be investigated and particulars set forth on the requisition.

## Supplies to Assemblers.

As the details are completed (i.e. become finished component parts), they are passed into the assembly store, and, in order to regulate the issue of supplies to the assemblers, such supplies are issued in batches comprising a given number of sets, such batches being made up in the store and issued out upon demand.

The advantages of this method are abundantly clear, for the issues are made in strict accord with the requirement, and duplication is, therefore, impossible. The operator's work ticket bears a specific batch number, this number being in relation to the units being assembled. For example, assuming the order to cover 500 units, the issues being made in batches of 10; batch No. 10 covers units 1–10, batch No. 20 covers units 11–20, and so on, until the batch which marks the completion of the order, numbered 500; this covering units 491–500. The batch corresponding to the number appearing upon the operator's work ticket is issued upon the presentation of that ticket, the foreman of the assemblers being instructed to draw out the batches in the correct sequence.

**MATERIAL SPOILED AND RETURNED**

ORDER NO. _____

FROM_____DEPT. *Date*_____

FULL DESCRIPTION. State also if scrap, repairable, or can be used elsewhere.

*Ex* DRAWING NUMBER _____ RECEIVED BY _____

(Signed) _____
*Foreman.*

FIG. 33

## Shortage Ticket.

It may be that, in some cases, certain details are not to hand when the batch is demanded, but as progress can be made despite this, the issue is authorized. With each batch, then, is given a ticket, giving particulars of the shortage (if any), and any subsequent demand for supplies upon that batch will be met only so far as the shortage is shown upon the ticket. This ticket is illustrated by Fig. 34.

**BATCH No. 120**

*Comprising*—10 Sets Type Z Units

| SHORTAGE |
|---|
| 5 Worm Wheels |
| 10 Shafts |
| 10 Distance Pieces |

FIG. 34

## Shortage List.

As further supplies are received in the assembly store, these are allotted to the batches in accordance with the declared shortage, the items upon the ticket being cancelled as the shortage is made good. A shortage list (*see* Fig. 35) is kept in the store, and this permits the store-keeper to see at

**SHORTAGE ON ASSEMBLED BATCHES**

TYPE Z UNIT

| DRAWING No. | NAME OF PART | BATCH 80. | BATCH 90. | BATCH 100. | BATCH 110. | BATCH 120. | BATCH 130. | BATCH 140. | BATCH 150. | BATCH 160. | BATCH 170. | BATCH 180. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1576 | Main Pinion .... | 5 | ~~10~~ | ~~10~~ | ~~10~~ | ~~10~~ | ~~10~~ 1 | ~~10~~ | ~~10~~ 5 | 10 | 10 | 10 |
| 1582 | Gear Wheels .... | 2 | ~~10~~ | ~~10~~ | ~~10~~ | ~~10~~ | ~~10~~ | 10 | 10 | 10 | 10 | 10 |
| 1583 | Locking Piece .... | | ~~6~~ | ~~20~~ | ~~20~~ | ~~20~~ 5 | ~~20~~ | ~~20~~ | ~~20~~ | ~~20~~ | ~~20~~ | ~~20~~ |
| 1217 | Worm Wheel .... | | | ~~1~~ | ~~10~~ | ~~10~~ | 10 | 10 | 10 | 10 | 10 | |
| 1223 | Shaft.... .... .... | | | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| 1547 | Distance Piece.... | | | 6 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| 949 | Long Pin .... .... | | | | | | | 4 | 10 | 10 | 10 | 10 |

FIG. 35

a glance precisely to what batches the details are to be allotted. When the shortage is cleared, no further supplies can be issued without a foreman's requisition, and here again the foreman must state his reasons for demanding further supplies. The method described is quick, clear, and economical, and when applied it never fails to give good results.

## CHAPTER XI

## TRANSIT OF MATERIAL

The handling of material inside the factory is a matter which is to-day receiving more consideration than formerly, this being due to the fact that the institution of piece-work or bonus systems for productive wages must needs focus attention upon the mode of transit, and emphasizes the necessity for economy in this direction.

With the factory sectionized to permit of rapid production, and with the manufacturing processes in connection with every detail devised for the purpose of employing specialized labour, it is obvious that all movements of material, both prior to and after any specific operation, must be accelerated. The operator, if he is to be wholly productive, must devote his whole time to the job in hand, which means that the material must be available when required, and that when the operation is completed a prompt clearance of the material must be effected, so that his movements in connection with the succeeding job are not hampered.

The fact that specialized manufacturing processes (compared with the older methods) throw a greater strain upon transport must not be overlooked, by which is meant that the present-day method is to have, say, three distinct processes in place of one. Actual manufacturing time is saved by this method, owing to concentration having a beneficial effect upon the proficiency of the operator, but if provision is not made for maintaining this time saved by ensuring adequate transit facilities there is actually nothing gained. In other words, if, owing to specialized methods of manufacture, 100 pieces which hitherto have taken 25 hours to complete can now be completed in 20 hours, nothing is gained if the 5 hours so saved are utilized for the extra handling involved.

Previously, one operator completed the 100 pieces in 25 hours, after which the material was transported to the inspection department or the store, but nowadays three operators are involved, the first completing his task in 10 hours, the second in 3 hours, and the third in 7 hours, making a total of 20 hours. But after the first operator has finished his task, the material must be removed either for inspection or to the man responsible for the next operation, and this procedure must be repeated after the second operation has been completed. The movement must, in such circumstances, be rapid and the onus is upon the management to ensure the transport facilities being equal to the demand.

### Inspection.

It is obvious that handling should be eliminated as much as possible, and in certain circumstances the process may be inspected before it leaves the operator, thus obviating the journey to and from the inspection department, whilst a judicious sectionizing of the manufacturing department will in many cases ensure the journey from process to process being as short as possible. But, on the other hand, it may not be good policy to adopt this method of inspection—the construction of the building may necessitate (if departmental inspection be adopted) the employment of three or four inspectors, whereas viewing in a centralized inspection department could be handled by two. There is no point gained in employing one or two extra inspectors with the idea of reducing handling time, and the best thing to do, therefore, is to see that the facilities for handling are efficient and economical.

### Method of Handling.

The structure of the building, and the type of manufacture involved, will determine to a very great extent the method to be employed to ensure expeditious handling. If the material be all very small and light work, it would probably be more economical to employ a boy to carry the boxes than to utilize trucks or to install an overhead runway. Mechanical appliances are economical only when they can eliminate labour, but the volume of work just large enough to keep a boy employed in taking it to its destination is not large enough to justify the installation of a runway or the provision of up-to-date trucks, either of which necessitate the attendance of a labourer, who would probably be idle for a good portion of the day.

### Mechanical Devices.

But if the volume of work warrants the use of mechanical appliances, then the method best suited to the need must be installed. As before mentioned, the structure of the building is a determining factor, for it may happen that the overhead runway, although quite suitable for the volume of work and the type of manufacture, is, nevertheless, ruled out because the structure of the building will not permit its installation. If a building is being erected in accordance with the specification of the manufacturer, he must not lose sight of the enormous possibilities of the overhead system of transport, and if this is suitable to his business, make the necessary provision for its installation.

Whatever system may be favoured, however, the lay-out of the factory must be such as will permit the fullest advantage being taken of that system, which means that the route to be traversed must be free from obstructions, and arranged for the appliance to do the work without a lot of subsequent handling. Sometimes the track runs at some distance from a certain machine, with the result that the material can only be hauled to a given point, the remainder of the journey being performed by hand labour.

Just imagine 50 castings, each weighing only 3 lb., being transported by means of an overhead runway or a bogie trolley to a point 3 or 4 yd. from the operator for whom they are intended. The labourer cannot haul the box containing the castings over the intervening distance, and he must needs take out the castings, one or two at a time, and carry these to their destination—a very protracted and a very expensive process, which, when the work has been done, must be repeated. The moral is that, whatever system is installed, make sure that it is a paying proposition by getting the best out of it.

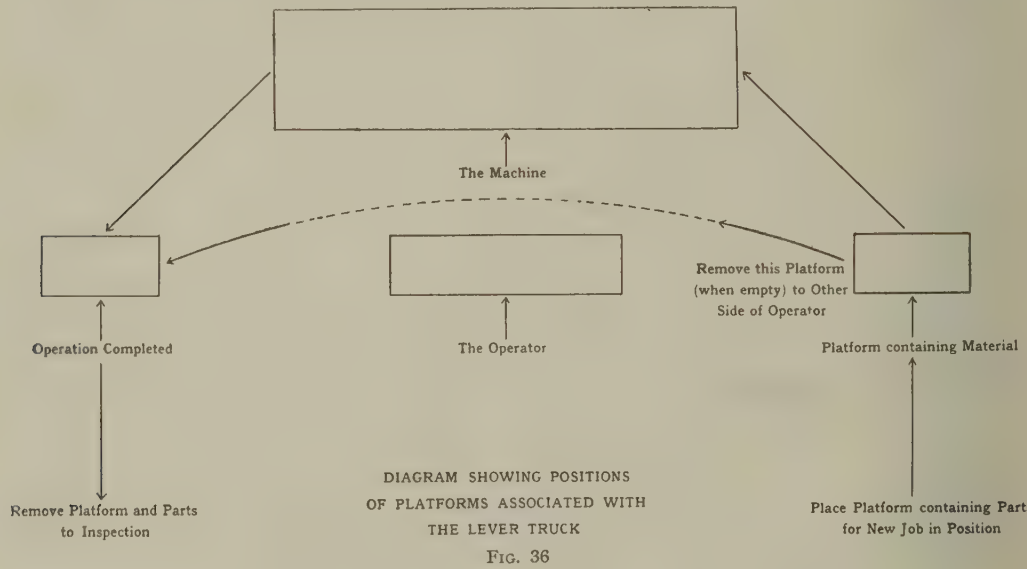

The Machine
Remove this Platform (when empty) to Other Side of Operator
Operation Completed
The Operator
Platform containing Material
Remove Platform and Parts to Inspection
Place Platform containing Parts for New Job in Position

DIAGRAM SHOWING POSITIONS OF PLATFORMS ASSOCIATED WITH THE LEVER TRUCK

FIG. 36

## Platform Lever Jack Truck.

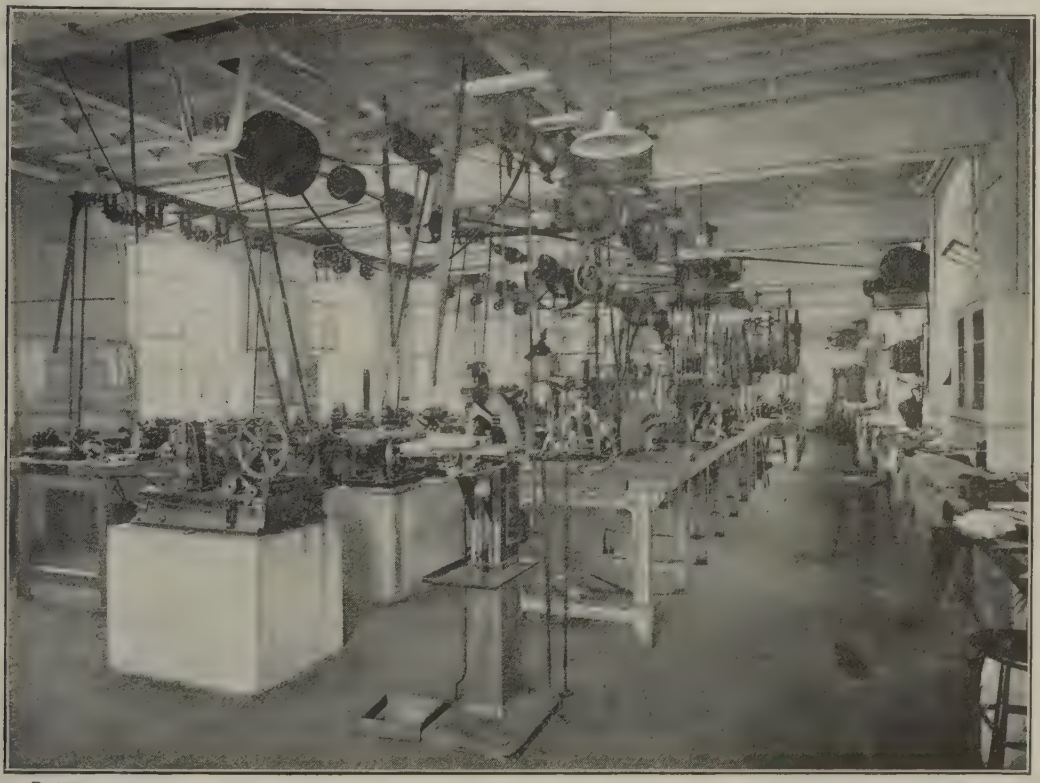
One of the most economical methods of internal transport is undoubtedly the platform lever-jack truck, which reduces handling to a minimum. This truck will now be seen in most up-to-date factories, but to be really effective it must be *the* transport system, and not merely an auxiliary, as is too often the case. The small manufacturer may cavil on the score of expense, but although the initial outlay is perhaps fairly high, it is not really so high as at first appears, for the system does not call for a large number of these trucks, which are rather expensive, but for a large number of platforms, which are not. Two trucks will do all that is required in a medium-sized factory, and in a small factory it is quite likely that one will suffice if the method is developed in accordance with the following.

The truck is equipped with a detachable wooden platform, upon which is placed the load, and it operates by means of a lever, which raises the platform and the load clear of the floor and permits its conveyance to the place desired. Upon arrival, the releasing of the lever causes the platform to descend to the floor, and the truck can be withdrawn, leaving the load upon the platform in the place desired. When the work has been completed, the truck is again requisitioned, drawn under the platform, which is again automatically raised, and the job is thus conveyed to the inspection department, or the store, as the case may be.

The shop into which this system is to be installed must have perfectly level floors, and the machines arranged in such a way as will permit the truck to deposit its load within easy reach of the machine operator. The slogan of this system is "No material upon the floor," and to allow this to operate, two platforms must be allocated to each machine.

The procedure adopted is as follows: The correct quantity of parts to be put into process is placed upon a platform by the store-man (or in a box

resting upon the platform if the batch comprises a large number of small details), the lever truck then run under the platform, and the load conveyed to its destination. At this stage the job upon which the machine-shop operator is engaged is on the point of completion, and he is already in possession of two platforms, one of which is loaded with the parts he has handled, whilst the other, which held the same parts before being put into process, is handling is reduced to a minimum, the details being handled only by (1) the store-man, (2) the operator (for actual process), and (3) the inspector. The method is very economical, for not only is handling minimized but the truck is always at work, seeing that, after the load is deposited, the truck is available for service elsewhere. So long as the number of platforms is commensurate with the need, one or two trucks will be sufficient for



*By permission* *Messrs. Gillett & Johnston, Croydon*

MACHINING DEPARTMENT FOR SMALL REPETITION WORK

now empty. When the labourer arrives with the new load, the empty platform is removed from its position to allow for the platform carrying the new batch to be deposited within reach of the operator—the truck is released, and is then used for conveying the platform carrying other parts completed to the inspection department. The empty platform is then put in the place thus vacated, and the machine operator goes ahead on the new job, taking the pieces one by one from the loaded platform, and when operated upon placing them upon the other platform, as illustrated by Fig. 36.

It will be seen that by this method actual conveyance, a point which should particularly commend itself to the manager of a comparatively small factory.

## Overhead System.

The overhead system of internal transport is too well known to necessitate a detailed description, and where the structure will permit, this method should be installed if the volume of work warrants. For the small factory, the switch trolley, operating upon an overhead runway, is especially suitable, and if the factory is well laid out, it is possible to convey the material direct and with a minimum of effort.

## Hoisting Facilities.

In some factories the floor area of the store is very restricted, this necessitating the storage of material at some distance above ground. In such circumstances, hoisting facilities should always be in evidence, as much time and labour is saved thereby. Even though the pieces must be deposited one by one in the locker, this is more easily and quickly accomplished if the store-man can remain upon the ladder until his task is finished, the parts being accommodated in a box suspended from a hoist at the most convenient height. If hoisting facilities are not in evidence, the store-man must descend to the ground perhaps twenty or more times, and carry the material up the ladder to the locker, this making the proceeding very protracted ; or, if this is objected to, he must invoke the assistance of another man, who, in throwing the details to the man upon the ladder, risks personal injuries or damage to the details owing to a miscalculation.

If the ordinary chain hoist is too heavy for the work involved, a rope hoist, designed to allow the load to remain automatically suspended, will be found very useful, whilst in the packing and despatch departments this hoist will be of great assistance, by reason of its adaptability and easy handling.

## Care of Appliances.

But, whatever appliances are favoured, they must be well cared for, if they are to remain efficient. The trucks should be well oiled and overhauled periodically, whilst the floors upon which they have to run must be kept in good repair. In regard to the overhead system, chains and ropes should be periodically inspected and tested, for accidents are likely to follow neglect. In the matter of chains (and these include slings as well as the chains associated with the hoist), they should be tested by experts at least once every twelve months (and in some cases every six months), and a certificate obtained setting forth the safe working load.

And when buying a hoist it is well to get one of a reputable make, for a low first cost here may mean the loss of some hundreds of pounds later, consequent upon damages for personal injuries caused by accident. The first-class maker supplies a reliable chain—a chain which gives due notice of its inability to stand the strain occasioned by an overload (and chains and hoists are often loaded beyond their specified working capacity). It is when a breakage occurs without warning that disaster happens, and the manufacturer in his own interests is advised to take quality (and not quantity) as the true meaning of cheapness in this connection at all events.

CHAPTER XII

# RATE FIXING

THERE are few shops nowadays which do not boast of a bonus or piece-work system in some form, so far as productive workers are concerned, for it is generally agreed that payment for the number of hours worked, without taking into consideration the actual output of the operator, is not calculated to show the best results, either from the standpoint of quantity or from the standpoint of cost.

It is obvious that the more an operator can produce in an hour, the greater the volume of output, and the cheaper the cost per piece ; and that this is recognized by the management is proved by the introduction of mechanical appliances, devised to extend the effectiveness of labour, whilst it is proved also by the fact that a system is in evidence to provide facilities whereby wasted time is eliminated and render productive every hour worked by the operator.

But although these innovations must of necessity materially increase output, their full value is not demonstrated unless their capabilities are fully exploited by the operator, which means that once again the deciding factor is the human element. In stating this it is not suggested that labour deliberately refuses to take advantage of the facilities offered, and that, being assured of a full week's pay, it sets out to give the least possible return. The real trouble is that, with the "day work" principle in force, the system ends somewhat abruptly and decidedly prematurely, so that, beyond a certain point, methodical progress is not maintained.

## Bonus System.

A bonus system, well conceived and efficiently applied, is as favourable to the worker as to the management, and it is not correct to assume that the bonus worker is forced to work harder than the man paid by the hour. On the contrary, the reverse is often the case, for it is by methodical handling rather than by a greater expenditure of effort that the bonus worker increases his output, and in many factories where a bonus system is in evidence, the lot of the worker (from every standpoint) is infinitely superior to that of the man employed in a factory where bonus work is unknown.

## Schemes.

If the factory is but small, there is no necessity for an elaborate scheme to be formulated, the main points to be observed being (1) that the rates are fixed by someone who thoroughly understands what is involved, and (2) that the rates, when fixed, will provide a real incentive to the worker. It is of no use bringing into existence a bonus

scheme which (no matter how hard the operator works) will not bring his wages above the standard day rate ; for this, instead of providing an incentive to increased application, on the contrary acts as a deterrent, and neither the firm nor the operator reaps any advantage.

## The Rate Fixer.

Whilst in the small factory the duty of fixing rates devolves upon the works manager, assisted by the department foreman, in one where the volume of work is greater, the engagement of a qualified rate fixer may be an advantage. In the latter case the individual responsible for the fixing of rates handles the matter scientifically, and deals with every job strictly upon its merits. He studies the job, the operation, the tool and the operator, and is thus able to calculate a time or price which will yield good results, both to the firm and to the operator. When the duty devolves upon the foreman, the same consideration to the factors involved is not always given, and the rate is either too high or too low, output being retarded in either instance.

## Fixing of Rate.

But, when once the rate has been fixed, it should not be altered unless a very good reason can be shown, for it must be remembered that this rate forms the basis of the cost clerk's operations, and if variations are frequent, accurate costing is well nigh impossible. The rate should be fixed with due regard to what can be done, and not based upon the operator's day-rate output, as is too often the case. For example, the output of the operator on a day rate may average 24 pieces per hour, and the bonus time is fixed at 26 per hour, upon the assumption that the operator will now complete 30 in the same time. But that operator may have been " going slow," and could probably complete 36 pieces an hour, or, on the other hand, he may have been extending himself to the utmost, and fail to get beyond 24.

Every manufacturing operation should be carefully thought out, standardized, and rated to suit a specific grade of labour. The importance of the piece, from a functional standpoint, and the degree of precision involved, are factors to be considered in conjunction with the class of labour employed and the facilities provided. To maintain output, the whole factory must be fully employed and the work equitably distributed, and it is of no use keeping one machine more or less idle whilst another has more work than it can cope with, simply because the latter machine can handle the work more economically.

If the work is rated on a time basis of " minutes each," the grade of labour employed upon a specific operation in connection with various orders must be uniform, e.g. the drilling operation on 100 plates, part No. 1,026, at the rate of 2 minutes each, must not in one case be given to a boy whose day rate is 4d. per hour, and in the next case to a man whose day rate is 1s. per hour.

The operations authorized in connection with any specific piece should be recorded in the correct sequence, the time allowance being placed against each operation (*see* Fig. 37). This is referred to

PART

NAME OF PART_____ TYPE____ No. _____

| | Operation | Rate (*Minutes each*) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Date | Time | Date | Time | Date | Time |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |

FIG. 37

when the operator's work ticket is made out, and no alteration should be permitted unless authorized by the rate fixer.

The card illustrated by Fig. 38 is for use when

**LABOUR RATES**

PART No._____ *Date*_____

TYPE____ DESCRIPTION OF PART _____

| Operations | No. of Pieces | Hrs. | Min. | £ | s. | d. |
|---|---|---|---|---|---|---|
| | | | | | | |
| SANCTIONED BY ____ | | | | | | |
| SPECIAL REMARKS ___ | | | | | | |

FIG. 38

work is placed into the shops in definite batches, for which a price is given to cover the operation. For example, an order for 100 motor car engines is split up into four batches, each comprising 25

sets of details. The operations necessary in connection with each of the details involved are enumerated upon a separate card, together with the bonus price allowed, and this price is in due course transmitted to the operator's work ticket.

When a price has been given, the onus is upon the foreman to give the operation to the workman who is capable of attaining the standard of workmanship required, and who is able to make at least 25 per cent bonus on the job; for, unless this is done, the bonus system is not yielding full value. Much has been said of the restricting of the foreman's legitimate activities under modern systems of organization, and rate fixing is often cited as a glaring example. So far from restricting the legitimate activities of the foreman, however, rate fixing has just the opposite effect, for the ingenuity of the foreman is taxed to ensure the work being turned out in accordance with the ruling of the rate fixer. The foreman is called upon to exploit the hitherto undeveloped possibilities of the labour under his control, in order to do what is required, and in this way an equal opportunity is offered every operator, whilst the managerial capabilities of the foreman are constantly exercised.

## Assembling Department.

When the bonus system is extended to the assembling department, the operations are specialized as much as possible, so that the precise nature of the work involved is clearly known. This means that assembling is divided into a number of sections, each section being considered an operation, and timed or priced accordingly. Thus, to give a simple illustration, two plates assembled with bolts and distance pieces form the frame, which is one operation, the running in of the gears is another operation, and the assembling of the gears in the frame is a third, and so on, until the unit is completed. The same operator may perform the whole of the assembly, although this is seldom the case, for sectional assembling is undoubtedly more expeditious and more economical, and is resorted to in most up-to-date factories concerned with interchangeable manufacture.

In some factories, however, it may be that the method of manufacture will not permit of automatic assembling, and that a good deal of fitting work is necessary in connection with the building of the unit. It is easy to see that, if this be the case, the cost of highly skilled labour is likely to be heavy unless it is methodically handled, and a judicious grouping together of certain processes, to form a distinct operation for which a piece-work price is given, will ensure the work being performed as economically as possible. To enable the operator to know precisely what he has to do for the rate appearing upon his work ticket, an operation sheet is prepared and posted in the department. The work ticket simply bears the operation number and the rate, and reference is then made to the operation sheet, which may read as follows—

*Operation* (1)—
Filing pole pieces for wing gauge. Running taps down frame holes. Running taps down pole pieces. Fitting bearings to shaft . Price 11d.

*Operation* (2)—
Assembling spools in frame, fitting brush-holders, and connecting up . . . Price 5d.

*Operation* (3)—
Assembling armature in frame, bedding and spacing brushes, and fitting pulley . . Price 7d.

This method may be found quite suitable for a repairing establishment, or in the fitting shop of a small factory concerned with fairly heavy work which is not manufactured upon a strictly interchangeable basis.

When the job is rated on a time allowance, the operator's work ticket shows the actual time taken, and the margin between that and the time allowed represents the bonus earned. For example, if the time allowed is 8 minutes per piece, and the number of pieces covered by the work ticket totals 50, the time allowance for the job is 6 hr. 40 min. The operator may complete the job in, say, 5 hr., in which case he has gained 1 hr. 40 min., which is paid for at ordinary rate and added to his weekly wages.

## Piece-workers' Records.

Even when the job is priced, it is still necessary for the actual time taken to be placed on record, in order to ascertain the amount of bonus earned on every specific job. The method employed varies in different factories, and two illustrations

**PIECEWORK COMPLETED**

DATE_____ ORDER NO. _____
OPERATOR'S NO._____ NAME_____

PART NO. _____
NAME OF PART _____
OPERATION _____
QUANTITY _____
PRICE_____PER_____ = £_____
TIME STARTED_____
,, FINISHED_____
PASSED_____(*Inspector*)
SIGNED_____ (*Foreman*)

FIG. 39

may be given. The first involves the issue of two tickets to the operator; one (Fig. 39) showing the time started and the time finished, together with

the price for the job, whilst the other (Fig. 40) is concerned with the operation as a piece-work job, and is in reality a payment voucher. It may be

No.___51761___

**PIECE WORKERS' OPERATION TICKET**

*Date*_____

| Order No. | Part No. | Type. | Quantity on Order. | Quantity Completed. |
|---|---|---|---|---|

DESCRIPTION OF PART _____

OPERATION _____

_____

RATE_____PER_____

MADE BY_____ No._____

| Quantity Passed. | By: | Foreman's Signature. |
|---|---|---|
| | | |

_____

TO BE KEPT BY OPERATOR. No.__51761__

ORDER No._____ QUANTITY PASSED_____

AMOUNT DUE TO OPERATOR £_____

FIG. 40

observed that the lower portion may be detached and retained by the operator with a view to checking his earnings, the main portion being sent (with the other ticket) to the wages clerk.

## Bonus Job Card.

The second method involves the issue of one work card for each operation (*see* Fig. 41), which is decidedly more elaborate than the foregoing, seeing that it is used, not only as a work card, but also as a delivery note and as a time and costing record. The application of this method is obviously governed by the conditions of manufacture, but in certain circumstances it will be of the utmost value, and, as will be seen, it is very comprehensive. The particulars covered by the card include the following, viz. the authorization of the order, the department to which it is issued, the machine upon which the operation has to be handled, the number of pieces required, and the nature of the operation, together with the price per piece (or specified quantity).

The foreman, when putting the job in hand, must state upon the card the time started, and should the operation extend over a number of

**BONUS JOB CARD**

No. _____

AUTHORIZED BY _____

DEPARTMENT _____

ORDER No._____ MACHINE No. _____

OPERATOR'S NAME_____ No._____

OPERATION _____

NAME OF PART _____

QUANTITY ON ORDER____ REJECTS____ PART No. ___

| | £ | s. | d. |
|---|---|---|---|
| PIECEWORK PRICE_____PER____ = | | | |
| TOTAL TIME WORKED_____ HRS._MIN. = | | | |
| OPERATOR'S PROFIT . £ | | | |

DATE COMPLETED_____ SIGNED _____
*Foreman.*

DATE RECEIVED IN INSPECTION DEPT.____ INSPECTED BY _____

RECEIVED INTO STORE

QUANTITY____ DATE_____ BY _____

CARD SENT TO COST OFFICE (*Date*) ____ RECEIVED IN COST OFFICE BY _____

| TIME ON JOB. | | | | Foreman's Signature. | Piecework Price Checked. |
|---|---|---|---|---|---|
| Date. | On. | Off. | Time. | | |
| | | | | | Time Exts. Checked. |
| | | | | | Totals Checked. |
| | | | | | All Piecework Calculations Checked. |
| | | | | | Time each and Cost each Checked. |
| | | | | | Posted to A _____ B _____ C _____ D _____ |
| | Total Time on Job | | | | Passed for Filing. |

FIG. 41 (*Front*)

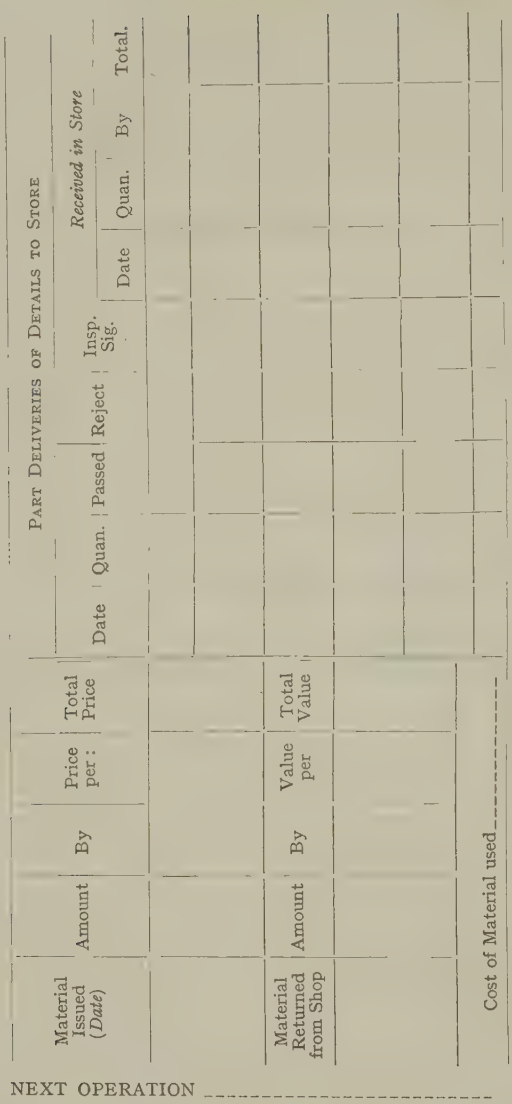



Fig. 41 (*Back*)

days he must check the time each day. When the operation is completed, the card accompanies the work to the inspection department, and afterwards to the store, being signed by a responsible official in each case. After being signed by the store-keeper, the card is sent to the cost office, where the piece-work price is checked, and the workman's profit calculated. On the back of the card is recorded particulars of material issued and returned, and, should part deliveries be made to the store of completed pieces, the quantity comprising each delivery is shown.

After payment has been made, the card is retained in the cost office, as it constitutes a very efficient prime cost record.

CHAPTER XIII

## THE ESTABLISHMENT OF AN INSPECTION DEPARTMENT

"Does the inspector retard or does he accelerate production?" is a question often asked, and especially in the small factory; yet the fact that the establishment of an inspection department is mooted at once suggests that production (without the ministrations of the inspector) is not making the headway desired. It may be said that the manufacturer associates the inspector only with the quality of production, and yet it is significant that the question of establishing an inspection department, in the majority of cases, only arises when the factory output fails to maintain a progressive tendency.

The fact is that, without an inspection department, that portion of the factory devoted to machining can produce upon a grand scale, and if that scale could be maintained in assembling, the idea of establishing an inspection department would not arise. Unfortunately for the manufacturer, however, a large output from the machining department does not always mean a large output from the factory, the reason being that (without an inspector to view the parts machined) those parts must needs be inspected by the operator in the assembling department, and his method of inspection, beside being unofficial, is very crude. He has to assemble the details to form a complete unit, and if a part will not fit, it has to be made to fit, or thrown out as scrap. Whichever course is followed, there must be delay and expense, and the only practical remedy, therefore, is to establish an inspection department, with a view to ensuring that every detail received in the assembling department will fit.

### Material Scrapped.

It must be remembered that material scrapped in the assembling department means the greater loss, by reason of the fact that all operations have been completed and paid for, and if material has to be scrapped, this should be done at the earliest possible stage of manufacture. Thus, all material should be inspected as soon as it arrives in the factory, and it should be inspected after each and every machining operation. Material accepted into

*Photo* *Kealeys, Ltd.*

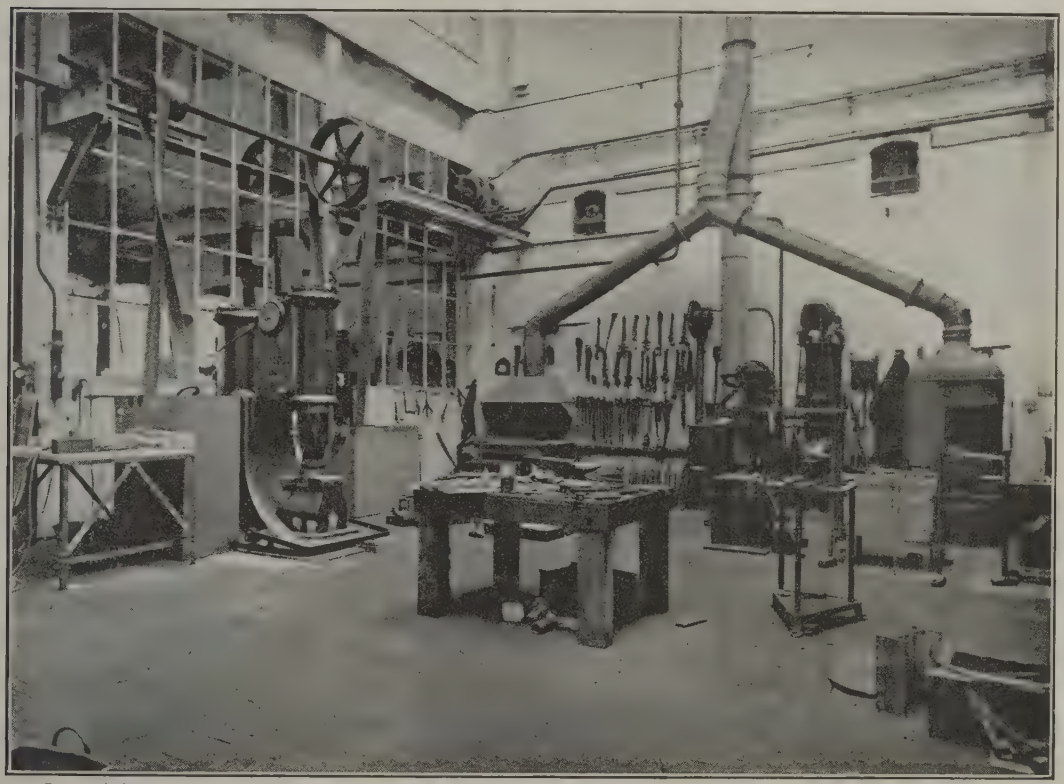
A CORNER OF A DRAWING OFFICE

(The Sperry Gyroscope Co. Ltd.)

*Frontispiece*

stock and issued out for process without having been inspected may have a good deal of money spent upon it before its inferiority is discovered, whilst the fact that the scrapping does not take place until long after the supplier has received his cheque means that the whole loss must be borne by the firm, for what supplier will replace (without charge) material sold and paid for two or three months previously ?

In like manner, material scrapped owing to galling to the management to discover, at a late date, that no more than 350 units can be assembled. An enquiry elicits the fact that there is a shortage of material—not that 150 complete sets of material have gone astray, but that 150 of one part, 100 of another, 50 of a third, and so on, cannot be accounted for. That the parts have been received in the assembling department is not disputed, but they have been presumably scrapped. No definite information on this point is forthcoming, the



*By permission* *Messrs. Gillett & Johnston, Croydon*

A Smith's Shop

faulty turning should not be operated on for milling, drilling, grinding, and the like, for, if this is done, the milling, drilling, and grinding operations involve an expense quite unnecessary ; whilst, in addition, the operator responsible for the faulty turning is actually paid for his error. The only remedy, again, is inspection after each operation, which ensures the fault being detected and the operator paid, not for his actual, but for his effective production.

When 500 sets of details have been machined and delivered to the assembly department, it is reason being that a number of parts were scrapped when the earlier units were being assembled, and were thrown aside and replaced by other parts in the assembling store.

## Start of Inspection Department.

It is when matters reach this stage that the establishment of an inspection department is definitely decided upon, and then follows (for a time) a certain amount of delay and confusion which makes it appear that the inspector is retarding output. Batch after batch of work is turned

back upon the machining department as inaccurate and the foremen are unanimous in denouncing the innovation. They argue (and quite rightly) that the establishment of an inspection department should not have consequences so vastly at variance with former practice, and even the management is soon forced to take active measures with a view to repressing the exuberance of the newly appointed inspector.

Strictly speaking, the fault lies with the management, for the instructions given are carried out to the letter. It is decreed that work must be inspected after every operation, and that which is not accurate must be returned for rectification. The inspector, in his anxiety to justify his appointment, subjects every part to a rigid examination, and, apart from the trouble and delay incurred by the wholesale return of work for rectification, further delay is occasioned by the minute examination of every piece comprising the batch, which may cover 500 or 1,000 details.

## Necessity for Caution.

Nothing is to be gained by rushing to extremes, and the utmost caution must needs be exercised when devising the new inspection department. Reforms, to be effective, must not be precipitate, and the inspector, upon his appointment, should be carefully instructed. The type of manufacture must obviously play a most important part, and the fact that the factory has carried on for a number of years without an inspection department suggests that a minute examination of every detail is not at the moment necessary. Some operations, of course, need more attention than others, and the inspector should be sufficiently familiar with the product, and also the manufacturing processes, to be able to appreciate this.

## Interchangeability.

It is not wise to bother too much about interchangeability at the offset, if interchangeability is not really essential. It is, of course, economical (from an assembling standpoint) to aim at interchangeability, but this often involves a much higher standard of workmanship than is at the moment possible, to ensure which would necessitate the employment of a higher grade of labour in the machining sections, or the provision of more up-to-date tools and machines. The inspector must be fully conversant with the facilities accorded the production foremen, and, whilst standing out for the best possible results, must not insist upon that which (under existing conditions) is practically impossible. As time goes on it may be possible for him to raise the standard, but this must be a gradual process, and not insisted upon when its practicability is open to question.

## Speedy Inspection.

The newly established department will most certainly retard output unless arrangements are made for speedy inspection, for the volume of work received into the department daily makes the minute inspection of every piece a matter of impossibility. The inspector may argue that unless he inspects every piece he is unable to accept responsibility for scrap detected by the assembler, but in regard to this the management must not, for a time at least, expect that the establishment of an inspection department will ensure perfection in connection with every detail sent to the assembler. What must be aimed at in the first instance is the minimizing and proper recording of such scrap, and then, as time goes on and the inspector settles down to his duties, the amount of scrap detected by the assembler will diminish, until at length it is practically eliminated.

The chief trouble (from the standpoint of output) in regard to scrap detected by the assembler is that it is never recorded, and, as a consequence, is not replaced until production is actually delayed on account of a "shortage." What happens is that a piece is scrapped in Batch 50, and so a corresponding piece is taken from Batch 51 to make good the deficiency. So long as scrap can be replaced in this manner no outcry is raised, but by the time Batch 200 is reached it is found that the scrap cannot be replaced, and also that the remainder of the batches comprising the order are minus that specific part, the 100 or so which should be included in these batches having been used to replace the scrap on the earlier batches. It is then that the outcry is raised; no one knows exactly how the shortage has occurred; the assemblers are at a standstill and output is arrested; and after a good deal of argument a replace order covering the number of details required is issued, and the machining department forced to give this order priority.

## Scrap Recorded and Replaced.

But when the inspection department is established, this scrap (diminished but not altogether obviated) can be recorded and replaced without loss of time by means of a simple method. The scrapped part can be replaced by a part from another batch as heretofore, but it must be given to the store-keeper in exchange, duly labelled to show why it has been rejected. All parts rejected by the assembler are placed in a box, and at the end of the week the box (with its contents) is sent to the inspector, who examines the rejected details and enters particulars upon his report. The return of rejected parts by this method also acts as a guide to the inspector, as the reason for rejection will show him what to look for in regard to similar parts in process of manufacture, with a view to preventing a repetition of the same trouble.

There are many processes which need but a most casual inspection, such as automatic work,

press work, etc., and the parts may be disposed of quickly. If 10 per cent of the bulk quantity is examined, the result arrived at will be a very fair index of the remainder. If 50 pieces, taken at random from a batch of 500, are favourably reviewed, the inspector is not risking much in deciding to pass the whole batch, for there is but little variation.

preparatory operations are efficiently performed. There are many processes such as those enumerated in the average factory, which need little or no attention at the hands of the inspector, and if he will but recognize this he will have more time to devote to the inspection of operations which really do matter, and discover that output need not be retarded as a result of his intervention.

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SECTION OF A CLOCK FACTORY—THE CASE-MAKING DEPARTMENT

### Processes Needing Little Inspection.

Operations of a preparatory character need not pass through the inspector's hands, if the following operation is handled by the same department. For instance, the grinding of material for a nickel plating process, or buffing for lacquering, cannot be inspected by the ordinary standard, and as the nickel plated or the lacquered piece (when finished) must pass the inspector, the operations leading up to these (although recognized as distinct operations) may safely be left to the foreman, who, in his desire to produce an acceptable finished article, will naturally see that his

## CHAPTER XIV

## INSPECTION ROUTINE

IT is not always necessary that the man appointed to control the inspection department should possess the highest mechanical or engineering qualifications, for in a great many cases the highly skilled engineer is not nearly so efficient an inspector as is the man whose skill as an engineer is of a more modest degree. If the factory is specializing upon precision work of a high standard, the engineering qualifications of

the inspector must, of course, be correspondingly high, but in the factory where the work is produced upon a repetition basis for a standard type of manufacture, the inspector must needs take a broad view of the work submitted to him, and in this respect utility takes precedence of technicalities.

## The Inspector's Knowledge.

In this case the inspector need not be qualified to produce work equal to that which he rejects, for his criticism and judgment is not discounted by his inability to do this. So long as he has a general knowledge of manufacturing methods, and an extensive knowledge of the commodity and what is expected of it, he should be quite capable of doing what is required, and instances are many where the comparatively mediocre mechanic can give points to the skilled engineer in the efficient running of an inspection department.

## The Young Inspector.

A young fellow, energetic and ambitious, who has been trained in the factory, is likely to welcome the opportunity to display his prowess and at the same time to broaden his experience, and such an appointment nearly always shows good results. At the outset difficulties will undoubtedly be encountered, for the young inspector will either defer to the opinions of older (and presumably more experienced) men, in which case the inspection department is utterly at the mercy of the foremen ; or he will go to the other extreme, disdaining advice which would, in all probability, be helpful to him, and generally making himself obnoxious to all who come in contact with him. Either failing is directly attributable to youth and lack of experience, and will disappear as time goes on and the duties of the inspector are understood.

## A Separate Department.

The inspection department, to be effective, must not be in the slightest degree controlled by the shops. However small the factory, production and inspection must be separate and apart ; and the zealous production manager, intent upon output, must not be permitted to influence the policy of the inspector. If the latter says a part is scrap, the decision may be challenged by the production manager, but he must not be allowed to over-ride it. On the other hand, it is easy for the young inspector to scrap parts which in certain cases could be made usable, and in the interests of economy, therefore, his independence must not be absolute. He should be subservient to a responsible member of the management, and before work is irrevocably scrapped the inspector's decision should be supported by this individual.

## The Work of Inspection.

Inspection is largely determined by the type of manufacture and the methods operating in the factory. If the product is of a high standard of workmanship, special appliances must be provided, and every dimension checked to a drawing, and the same remark applies if strict interchangeability is insisted upon. On the other hand, inspection may take the form of "gauging," "go" and "not go" gauges being the recognized medium, and when this is the case the work of the inspector is simplified.

It is generally agreed nowadays that every part should be inspected after every operation, but whereas in some factories all parts are conveyed to the inspection department after every operation, in others the parts are inspected in the productive departments, being sent to the inspection department only after the completion of the final operation.

In support of the latter method, it is pointed out that the transit of material is more expeditiously handled, and also that, the inspector being practically on the job, he is able to obviate scrap by pointing out the error before the whole batch has been completed. There is much to be said for this, but before the method is adopted it is well to consider the disadvantages.

## Obviating Delays.

In the first place (and especially in the small factory) a good deal of delay often occurs owing to the fact that the section inspectors cannot give a decision without reference to their chief ; whilst, on the other hand, the chief is not able to control the actions of his subordinates, because he is not in constant touch with them. It must be remembered that the chief is a worker, and not merely a supervisor. He probably handles all work received into the inspection department, i.e. final operation, whilst two or more subordinates are responsible (in the manufacturing departments) for intermediate operations.

It is easy to see that, in such circumstances, his is a difficult position, for he must either pay frequent visits to his assistants, to answer their questions or to satisfy himself that they are doing what is expected of them, in which case his own work is necessarily delayed ; or he must content himself with his own work and trust to his assistants to do what is necessary in other directions. And when it is considered that these assistants are comparatively young and low grade men (or girls), it is easy to see that the latter course is not altogether wise.

## Increase in Personnel.

Another objection to inspection in the manufacturing departments is that it means an increase in the personnel. When all parts are received in a central department for inspection, the whole of the work can probably be handled by the inspector and two girls, but when the other method is favoured it is quite likely that, to deal with the

same volume of work, an additional inspector is required. The inspector attached to one section may have a little time to spare, yet not sufficient to allow him to inspect work in another section, and so that time is lost. It will usually be found that, if there are three manufacturing sections with an inspector attached to each, the amount of work handled by those three inspectors could (if sent to a central department) be handled by two inspectors, and this goes to show that time spent in transporting material is not always wasted.

## Routine.

The constitution of the inspection department being decided upon, the question of routine must next be debated. If the manufacture is of a repetition character, and more or less interchangeable, the gauging principle of inspection is at once the most simple and the most effective, contingent, of course, upon a complete set of gauges being available for the inspector's use. It happens in many factories that this point is not always fully appreciated, and much delay is occasioned if the inspector has to consult various officials in order to arrive at a standard, or if he has to depend upon gauges which are in use in the manufacturing departments.

Even when a complete set of gauges is available for the inspector delays are not always obviated, as many factory managers are under the impression that the greater accuracy must be associated with the inspector's gauges. It is obvious that, of the two sets of gauges provided, the set in use of the shop is the most likely to suffer from wear and tear, and details conforming to these gauges in many instances are rejected by the inspector, because the gauges *he* uses are more accurate. To maintain a high standard of production, and at the same time avoid any semblance of delay, the inspector's gauge should have the larger tolerance, and when this is done the "returns for rectification" sensibly diminish. In other words, the operator is expected to work to a standard of a slightly higher degree than that demanded by the inspector, and the small inaccuracy, occasioned by error or by the wearing of the gauge, need not of necessity provoke an adverse comment from the inspector.

## Passing the Work.

So long as the work conforms to the standard set by the inspector's gauge it may be passed without comment (assuming that no material defect is detected), the signing of the operator's work ticket by the inspector being the official indication of the passing of the work. This is taken into account when the ticket is forwarded for payment, and there must be a hard and fast rule that no work is paid for unless the ticket bears the inspector's signature.

## Reasons for Rejection.

When the work submitted does not conform to the standard, it must be either returned for correction or scrapped, according to the judgment of the inspector. Assuming the former to be a case in point, the work (with the ticket) is returned to the operator, and attached to the work ticket is a slip (*see* Fig. 42) written by the inspector, and

**RETURNED TO OPERATOR**

ORDER NO.____ PART NO.____ QUANTITY _____

REASON _____

_____

(Signed) _____

(*Inspector*).

RECTIFIED

DATE_____ ACCEPTED_____

(*Inspector*).

FIG. 42

giving reasons for rejection. The operator must effect the rectification at his own expense (the time spent upon this, of course, adversely affects the bonus made), and the ticket is not passed through for payment until the work has been corrected to the satisfaction of the inspector.

## Rectification Ticket.

Sometimes the error which demands rectification is not detected until after other processes have been completed, or it may be that the man really responsible cannot repair the error (e.g. a broken tap cannot perhaps be extracted by the drilling

**RECTIFICATION**

| Order No. | Part No. | Quantity. | Name of Part. |
|---|---|---|---|
| | | | |

PARTICULARS OF FAULT _____

OPERATIONS REQUIRED _____

FAULT OF _____

INSPECTOR'S SIGNATURE _____

WORK IN PROCESS

OPERATOR___ _____ No. _____

WORK STARTED____ ___ WORK FINISHED _____

FOREMAN'S SIGNATURE _____

INSPECTOR'S SIGNATURE _____

FIG. 43

machine operator), and the rectification must be handled by another operator. When this is the case, a rectification ticket (Fig. 43) is made out, this quoting the original order number, but when the ticket is received in the cost office the time involved is charged as extra cost against the job.

## Scrap Sheet.

When parts are definitely scrapped, particulars are entered by the inspector upon a scrap sheet (Fig. 44), this giving the quantity scrapped and who is responsible. The parts are labelled and

WEEK ENDING_____ No. _____

**INSPECTOR'S SCRAP RECORD**

| Date. | Order No. | Part No. | Name of Part. | Quantity. | Nature of Defect. | Fault of : | Inspector's Signature. | Remarks. | Works Manager's Signature. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

RECEIVED IN PROGRESS OFFICE (*Date*)_____BY_____ PASSED TO COST OFFICE (*Date*) _____

FIG. 44

kept until the end of the week, when they are examined by the works manager, and if his opinion coincides with that of the inspector he signs the sheet, and the parts are placed in the scrap bin. The sheet goes to the progress office, where orders for replacements (if necessary) are made out, and the sheet is then forwarded to the cost office, for an inventory of scrapped work to be compiled and the loss calculated.

If the operator is responsible for the scrap, he is not paid for the work done, the number of pieces on his work ticket being reduced to the quantity actually passed. If, however, the trouble is due to circumstances beyond the control of the operator, such as defective material or inaccurate tools, etc., the operator is entitled to payment for all work done, unless it can be proved that he deliberately proceeded with the work whilst fully conscious of the defect. The active supervision of the foreman is necessary to obviate this, but, nevertheless, the responsibility of the inspector is great, and the utmost care must be exercised in arriving at a decision.

## CHAPTER XV

# THE PURCHASING ORGANIZATION

THE "buyer" in the small factory is usually the head of the concern, for the matter is of sufficient importance to warrant the personal attention of the most highly placed official. There is in every factory a purchasing department, presided over by a man who is ostensibly the "buyer," and who is responsible for that branch of the organization; but in the small factory, at all events, the actions of this individual are controlled by the proprietor, or the managing director, who either directly sanctions each specific purchase or devises a system for the purpose of making the purchase of materials a more or less automatic process.

The latter method comes into force when stocks are held upon a maximum-minimum basis, and this method is to be commended when manufacture is conducted upon repetition lines. For in this case the amount of material to be held in stock is pre-determined, the stock record card shows when the ordering point is reached, and the buyer merely has to place an order for the amount of material necessary to bring the stock again to normal.

## Determining Stock Figures.

To determine the stock figures several factors have to be taken into consideration, including the capacity of the manufacturing departments; the variety of manufacture with which the material is associated; the time involved in manufacture and also in getting fresh supplies; and the most economical amount which can be purchased. We may deal briefly with these points in the sequence enumerated.

First as to details to one specific drawing number; the output from the manufacturing department may be estimated at 250 per week, this number accounting for, say, 40 lb. of steel bar; whilst a similar amount of material is required in connection with the manufacture of details to another drawing number, the same size of steel bar being used in each instance.

It will thus be seen that 80 lb. of a certain size of steel bar is required each week, and as this material can be purchased fairly easily, there is no point in holding heavy stocks. On the other hand, however, the purchase of very small quantities would be by no means economical, and the minimum figure (i.e. the ordering point) might well be based upon a three months' requirement, which would be, approximately, 10 cwt.

The economical ordering quantity is the principal factor in determining the maximum figure, and as in all cases of steel bar (excepting the smallest sections) any order of less than 2 tons is not really economical, this amount may be decided upon to allow for a maximum of 1½ tons, this being three times the minimum. Orders for smaller amounts can be placed when orders for other sections of steel are placed at the same time with one firm, but it is better to take each section upon its own merits, as when stocks are held upon a maximum-minimum basis it is by no means certain that the stocks of two or more sections will reach the ordering point at precisely the same time.

## Specialized Products.

Another point to be considered in this connection is that, whilst one supplier can give the best quotation for one section of bar, another section can be supplied more economically by a different firm. Specialization is practised by material suppliers, and the wise buyer sets out to discover the specialized product of each firm. All orders for steel bar are not of necessity placed with one firm, although in certain circumstances this may happen.

With certain materials, a three months' minimum may be regarded as excessive, and can be reduced with advantage. In ordering belting, for example, it must be remembered that all standard sizes can be delivered from stock by the supplier, and the buyer need hold only the amount necessary for the immediate requirement. It is known that belting deteriorates unless stored under ideal conditions, and these conditions do not exist in the majority of small engineering factories. The supplier knows his product, and may be trusted to keep it in good condition; and whilst it may be advisable for the buyer to place a contract with a supplier to cover a specific period, he should stipulate that delivery must be made only as and when required.

## Material Stock Cards.

Every material stock record card should show precisely for what parts the material is required, and also the maximum and the minimum figures. The card also gives particulars of all receipts and issues, with a column showing the exact amount of material in stock after each entry, this enabling the clerk to see at a glance (without any preliminary calculation) when the ordering point is reached. Each card is dealt with entirely upon its own merits, and without reference to any other record, which means that when the record of ⅝ in. diameter steel stock shows the material in stock as being at or below the minimum figures, further supplies are at once requisitioned.

**MATERIAL STOCK CARD**

PART No._____

PARTICULARS OF MATERIAL_____ USED FOR_____

MAXIMUM STOCK_____ MINIMUM STOCK_____

| On Order | | | Received | | | Issued for Manufacture | | | | Excess Returns | | | Material in Store | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Order No. | Amount | Date | Order No. | Amount | Date | Order No. | For Part No. | Amount | Date | *Ex* Order | Amount | Amount | Sig. |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

FIG. 45

The stock card (*see* Fig. 45) may be kept in the store or in the purchasing office, but for the small factory the latter idea obviates duplication, and saves a good deal of unnecessary work. The purchasing clerk gets first-hand knowledge of all material placed on order outside, seeing that he is responsible for this, and he can, therefore, make the entry upon the card without having to pass the information on to a stock clerk. When supplies are received, he receives an advice note or the invoice, and this is checked by the weight of material actually received, as vouched for by the storeman, this weight being duly entered upon the card.

## Issues to Manufacturing Departments.

The issue of material to the manufacturing departments has already been dealt with, and whether this is by means of a specification or a requisition, the authorization is used by the

purchasing clerk for the purpose of "posting" the record card. In course of time the ordering point is reached, and the card is brought out for attention.

It may be that each day a number of cards must receive attention, and that more than one refer to material which can be purchased from one supplier. The purchasing clerk will group the cards in accordance with the material covered, so that all cards relating to steel bar are together, all cards connected with sundries (which are usually purchased from one supplier) together, and so on.

## Enquiries for Quotations.

The next business is to send out enquiries for quotations, this being done in all cases where supplying firms can be put into competition. Because a measure of satisfaction has been obtained from one firm, it by no means follows that the best results have been achieved, and it is when the supplier knows that he is competing with others that he extends himself to secure the order. Whilst price is a most important factor, it is by no means the only one, for quality and delivery are in many cases equally important, and must not be lost sight of by the buyer.

If the ordering point has been scientifically fixed there should be no undue strain upon the question of delivery, for it is known when that point is reached that there is sufficient material in store to keep the manufacturing departments fully employed for three months. The buyer will require at least a week for soliciting quotations and making his decision. So long as he gets the material in from eight to ten weeks from the date of the order this would be quite satisfactory to him, but he must give the supplier a time limit, and insist upon this being kept. The enquiry must cover a delivery clause, which may place the onus upon the supplier to give a delivery date, or may give a definite time limit, and require the supplier to agree to this.

Delivery is more important where orders are placed for an immediate requirement, but, as before mentioned, such orders are only placed when it is known that a speedy delivery can be made. In any case, however, delivery must figure upon the quotation, and not be left until the order is placed, otherwise it may be repudiated by the supplier.

## Complete Specification Necessary.

A complete specification must accompany the enquiry, so that the supplier is under no misapprehension as to what is required. The quality of the material must be pre-determined and specified in no uncertain terms, for it is only when this is done that satisfactory material will be forthcoming. In the absence of precise instructions, the supplier will naturally quote for the cheapest material, and although the buyer may regard the quotation with satisfaction, and place an order on the strength of it, his satisfaction is short-lived when the material received shows a variation of, say, ·006 in. when the requirement will not permit a variation of more than ·002 in.

If bar steel is being enquired for, the enquiry should state whether "exact" or "commercial" is required, as there is a difference of several pounds (sterling) per ton in the prices of the two qualities. Also, when ordering strip steel the enquiry should specify "square edges" if these are required, otherwise "sheared" strip will be quoted for, and the receipt of such material will cause trouble in the factory.

## Schedule of Standard Materials.

If finished, or partly finished, articles are being enquired for, the specification must give all outstanding features, and, in such a case, it may be well to send a blue-printed copy of the specification with the enquiry. For materials such as steel, etc., a form similar to Fig. 46 may be compiled for the use of the buyer, who would, when soliciting a

**SCHEDULE OF STANDARD MATERIALS**

| Identification No. | Particulars of Material | Outstanding Feature | Used for Part Numbers |
|---|---|---|---|
| M 1 | $\frac{5}{8}$ in. dia. Ø B.D.S. | Exact (Tolerance ± ·001") | 468. 824 |
| M 2 | $\frac{1}{2}$ in. dia. Ø M.S. | Commercial | 318. 387. 421. 479 |
| M 3 | $\frac{3}{4}$ in. × $\frac{3}{16}$ in. Bright Steel | Square edges | 551 |
| M 4 | $1\frac{1}{8}$ in. dia. Ø Bright Steel | Shafting steel | 374 |
| M 5 | 16 S.W.G. C.R.C.A. | "A" Quality Sheets 6 ft. × 3 ft. | 297. 298. 301. 444 |
| M 6 | | | |
| M 7 | | | |
| | | | |

Fig. 46

quotation for any specific item, refer to the form and make such comments upon the enquiry as are necessary.

## Enquiry Form.

The enquiry form (*see* Fig. 47) is sent to a number of firms selected by the buyer, this selection being based upon previous dealings, or upon data in the form of advertisements or catalogues. The journals catering for the trade with which the buyer is associated should be available, for therein will be found much information which is of value to the buyer. A list of likely firms is tabulated, and referred to when enquiries are being sent out. In certain cases it may be advisable to compile a comparison chart showing the quotations of a number of firms as a guide to future action on the part of the buyer. The one illustrated (*see* Fig. 48) refers to castings and is quite self-explanatory.

**ENQUIRY**

Ref._____

Date_____

*From* BLANK & Co., LTD.,
LONDON

*To M*_____

_____

Dear Sirs,

Please quote us per return your lowest prices for supplying the undermentioned goods—

| Quantity Required | Specification Number | Particulars |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

DELIVERY.

CONDITIONS

All above Particulars to be stated in Quoting.

In the event of *non-fulfilment* of the conditions stated, we reserve to ourselves the right of either cancelling this Order or refusing to accept delivery of the goods mentioned.

1. That goods must be of the quality specified, and subject to our approval at any time within 30 clear days after delivery.
2. That date of delivery and price be specified.
3. That no alteration in quality or quantity be made without permission.

Signed_____

FIG. 47

## Dealing with Quotations.

When quotations are received they are perused by the buyer, and a selection made after all points of interest have been noted, and the official order is then sent to the successful firm. If the buyer has already had business dealings with the firm in question an account has in all probability already been opened, but in dealing with a firm for the first time a cash transaction is insisted upon or trade references demanded. Wherever possible the cash transaction (if further business is likely to follow) should be avoided, references being furnished with a view to opening an account. Two such references at least are required, and in this connection it is well to submit the names of well-known firms with whom the buyer has an account, such firms not being in active competition with the supplier who is at the moment being approached.

CHAPTER XVI

# PURCHASING ROUTINE

BEFORE proceeding further with the routine of the purchasing department, we shall do well to consider the purchase of supplies for the factory where the maximum-minimum idea of stock-keeping is not favoured. It may be that, although manufacture is upon more or less repetition lines, the sales cannot be calculated too far in advance, or that changes are frequent on account of improvements in design. As an illustration, we may cite the factory engaged upon the manufacture of motor

**QUOTATIONS FOR CASTINGS**

| FIRM | Patt. No. 460 | Patt. No. 481 | Patt. No. 482 | Patt. No. 499 | Patt. No. 501 | Patt. No. 509 | Patt. No. 523 | Patt. No. 550 | Patt. No. 551 | Patt. No. 578 | Patt. No. 591 | Patt. No. 615 | Patt. No. 621 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Central Foundry Co. | 32/– | 55/– | 61/6 | 55/– | 30/6 | 31/– | 34/6 | | | | 41/6 | | |
| Smith & Roads | 39/6 | 57/6 | | | | 31/6 | | 29/6 | 52/– | | | 38/– | |
| Black & Co. | | | 61/– | 54/6 | 33/– | 35/6 | | 35/– | | 51/– | 40/– | | 42/– |
| Main Foundry | 34/6 | 62/– | | 58/– | | | 33/– | | 49/6 | | 43/6 | 42/– | |
| Green & White | | | 63/6 | | | | | | | 50/– | | 51/– | 46/6 |

FIG. 48

cars, the design of which is changed each year; and in such a case it is certainly not advisable to fix in advance a maximum-minimum stock, as a change in design would probably result in a lot of obsolete material being left in stock.

## Ordering Assembled Units.

The manufacturer, therefore, decides to place in his shops an order for a definite number of assembled units, this number being based upon the capacity of his manufacturing departments, so that the order will keep the shops fully employed for a certain period. The factory may be planned to produce 50 units per week, and an order for 1,300 units will keep the factory employed for six months.

It is assumed that there is at the moment an order for a similar number of units in process of manufacture, and that this order has already been in the shops some three months, which means that employment is guaranteed for a further period of three months. It is high time now, however, to consider what must follow, in order that there shall be no break in production, and the first thing to consider is what further sales are likely to be effected, and also what changes in design (if any) are necessary. These points having been settled, a new specification is drawn up, showing the amount of material required for a further 1,300 units, and the purchasing clerk is soon busy fixing up contracts for supplies.

It is known by all concerned that in three months from date the material for the new order must be in the factory, but it may be remarked that, in some instances, further supplies of material must be received long before that time. The whole of the work in any one manufacturing department is not completed at the same time—there must be machines which will have discharged their commitments some days, or may be weeks, in advance of others, and these machines must not be allowed to remain idle whilst the balance of the work is being completed elsewhere. The new order must be brought forward to fill the gap,

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MACHINING DEPARTMENT (WOODWORKING)

and this means that certain of the material ordered in connection with this must be available some weeks before the three months limit.

## "Money Lying Idle."

On the other hand, it is not in every case advisable to order at the outset the whole of the material required, with a view to getting it into the factory within three months from date, for much of this material cannot be utilized for quite a long time, and, therefore, represents money lying idle. What has to be remembered is that the manufacturing departments are planned to produce 50 sets of parts each week, commencing at a certain date, and it follows, therefore, that some of each class of material must be available for use each week.

The buyer, who, in this instance, is probably the managing director, is not prepared to spend money on material which will lie idle in his store for a matter of six months, but yet he must ensure that there is a sufficiency of supplies for his manufacturing departments. On the other hand, the economical purchasing quantity is again an important factor, and after considering the matter from every standpoint he will (with a few exceptions) authorize the purchase of material for one-half of the units on order, the purchase of the balance being deferred for a short time. The exceptions refer to material which, comparatively inexpensive, can be purchased in bulk advantageously; whilst from a manufacturing standpoint it is more economical to complete the work at one setting. Small work produced upon an automatic machine may be cited as an example, the material required for the manufacture of the 1,300 details being a very small amount.

## Quotations.

Enquiries are sent out, and quotations received, in the manner already described, and in requisitioning the amount of material required, a generous allowance should be made for manufacturing scrap. It is a mistake to order just the bare requirement, for if this is done there is sure to be trouble at a later date, when scrap will prevent the completion of the 1,300 units covered by the order. A small amount of material over and above that actually required will obviate trouble and prove economical, and even though there be a slight surplus at the end of the order, it is more than likely that this can be absorbed by the succeeding order, and in any case a surplus is better than a shortage.

The quotations should be perused by the managing director, who instructs the purchasing clerk to place the necessary orders. When this has been done, the purchasing clerk may be trusted to follow up the orders, urging the material as required, and keeping what records are necessary.

We may now revert to the routine of the purchasing office, observing that for the small factory elaboration is unnecessary. Two methods may be referred to here, each of which has been proved to be quite satisfactory, and although the former may at first glance be considered somewhat expensive for the small manufacturer, it may be observed that the writing of the supplies requisition automatically brings into existence what other records are required, not only for use in the purchasing office, but also for use in the store and the costing office.

## The Order.

The order written (or typed) for the supplier (*see* Fig. 49) may be extended by the use of carbon paper, so that copies automatically become available for (1) the purchasing office file, (2) the receiving store-keeper, (3) the purchasing card record, and (4) the cost office card record; the procedure being as shown below.

The original is, of course, sent to the supplier, and the first copy (1), which is an ordinary (unprinted) sheet of white quarto paper, is placed

**ORDER**

No._____

*From* BLANK & Co., LTD., LONDON

DATE_____

*To M*_____

_____

Please supply goods as under, in accordance with your quotation of the_____inst.

| Quantity | Specification No. | Particulars | Price |
|---|---|---|---|
| | | | |

Delivery_____ Terms_____ Signed_____

FIG. 49

in a folder with the quotation and put into a vertical file under the supplier's name. Each order bears its own serial number, which is referred to in all correspondence, and this number, of course, appears upon every copy of the order. All correspondence received is, when dealt with, placed in the folder with No. 1 copy, the whole forming a complete record of the transaction.

The second copy (2) is likewise an unprinted sheet of paper, but of a distinctive colour, and this is sent to the receiving store-keeper, who files it in accordance with the serial number. When the material is received it is checked in accordance with this copy, the copy and the material then being handed to the inspector. After the material has been examined, the inspector's comments (or signature) appear upon the copy, which is in due course received in the purchasing office, where it is accepted as evidence of the material being received and examined.

## Purchasing Order Card.

The third copy (3) is a card, and is illustrated by Fig. 50. This card is filed in the purchasing office under the part number of the material appearing thereon, and is used by the purchasing clerk for recording particulars relating to the speeding up of material on order, receipt of material rejections, and other matters of interest. The fourth copy (4) is a somewhat similar card for the use of the costing department, and shows at a glance the value of material on order, payment for which the firm is committed to. The card is referred to when the invoice comes up for payment, and this record is a check upon the activities of the purchasing office.

This method has much to commend it, and especially where definite manufacturing orders are placed in the factory in the manner already described. When once the series of orders is placed the work of the purchasing clerk is largely a matter of routine, and by going through the card records once weekly all matters demanding his attention are brought to the surface. In passing, it may be remarked that in one factory where this method was in operation, the one purchasing clerk found ample time to handle the duties associated with the payment of wages, in addition to the duties associated with the purchasing department.

## Another Method.

The second method to be described is one which finds favour in many factories, being inexpensive and quite simple to handle. Only one copy is taken of each order placed with an outside supplier, and this copy is used for the purpose of recording particulars of the purchase upon what is termed a purchase record card (*see* Fig. 51), the copy then being filed for future reference. It will be observed that while the purchase record card is associated with one specific part number, it is not limited to one order, and this makes it particularly adaptable to the requirements of the factory where stocks are kept upon a maximum-minimum basis.

**PURCHASING ORDER**

No._____

*To M*_____

Date_____

_____

In accordance with quotation of the_____inst.

| Quantity | Specification No. | Particulars | Price |
|---|---|---|---|
| | | | |

Delivery_____ Terms_____ Signed_____

FIG. 50

## Purchase Record Card.

The card shows the date upon which the order was placed, the order number, quantity or amount, and from whom purchased. The material covered by the first order may have been purchased from Jones & Co., and the second from Brown & Sons, but so long as both orders refer to material for the same part number they appear upon one card. The part number is the key to the situation, and all particulars of purchases relative to this are

ascertained by a perusal of the card bearing the part number.

In addition to the particulars already enumerated, the card shows all receipts, whilst for costing purposes the two last columns are utilized. It is not necessary to have a duplicate set of cards, for in all probability purchasing and costing are combined in one office, and even if this idea is not favoured, the cards may be handed to the cost clerk at stated intervals for the price extensions to be made.

The back of the card is utilized for the purpose of recording rejects, particulars being entered thereon from the inspector's report. The record

**PURCHASE RECORD CARD**

Part No._____

TYPE_____ DESCRIPTION_____ DRAWING NO._____ MATERIAL_____ No. per Set____

| Date | Order | Quantity | Purchased From | Delivery From | Received | | | Total | Due | Date Invoice | Price Each | Total Value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Date | No. | Weight | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

FIG. 51

shows the date, amount, order number, and the supplier's name, together with the reason for rejection; whilst a record is also made of the return of the material to the supplier. All material rejects are recorded upon the card, even though the material has been put into process and the defect revealed after the material has been accepted and paid for. Here, however, care must be taken to see that the reject is returned to the actual supplier, and this can be ensured by placing an identification mark upon all material received into the factory.

Whilst purchasing is of the utmost importance, and must needs be taken seriously, it will be found that either of the two methods described will be of service to the small manufacturer, who requires a system simple and inexpensive, yet one which will cater for every detail and prove efficient and effective.

## CHAPTER XVII

## STORES LOCATION

IT is impossible to ensure efficiency in the manufacturing departments unless the organization of the store is efficient, and yet there are many works managers who, concentrating upon economical manufacture, have no time to spare for the store, and wonder why it is that their efforts are not wholly successful.

In many of the older constructed factories the store is located in the most inaccessible part of the building, the idea being that this phase of the organization is of little importance, and that accommodation for actual manufacture must take precedence. And not only is the store badly placed, but it is also badly organized, the space provided being inadequate, and method and system entirely absent.

It is a somewhat difficult matter to change the venue of such a store, even when its importance as a unit of the factory organization comes to be recognized, owing to the cost involved in the reconstruction of the manufacturing departments. Reforms, therefore, can only be effected in connection with the internal organization of the store, with a view to ensuring a higher degree of efficiency, and these reforms can only be accomplished when the principles of store-keeping are thoroughly understood.

### Functions of Store.

Much more is involved than the mere stocking of material, for the manufacturing departments must be fed, and, when the process is completed, must also be cleared. No matter what method of store-keeping is favoured, the functions of the store may be summarized as follows, viz.: (1) The receiving and checking of material from outside sources; (2) the storage of material for manufacturing purposes, and the issue of such material in accordance with the orders received; (3) the temporary storage of details (between operations) in process of manufacture; (4) the storage of finished component parts; (5) the storage of section (or sub) assemblies; and (6) the storage of the completed unit prior to despatch.

The store, therefore, must be constructed with a view to giving the best possible service in each case, taking into consideration the specific duties, which may be amplified as follows.

### Material Received.

1. Material from outside sources must be received, unpacked, checked to advice note or invoice, passed to inspection, and subsequently

forwarded to the correct destination. The receiving storeman must be able to identify each consignment, even though no advice note has been received; must have facilities for counting and weighing; be able to handle the material expeditiously, and know precisely for what department each consignment is intended. He must know what empties are returnable, and, in the event of departments promptly upon demand, and the storeman must know, before the material is issued, that the demand is strictly *bona fide*. Records of all receipts and issues must be kept, so that the exact stock of any specific material may be ascertained at any time, and orders can be placed for further supplies easily enough to avoid any hold-up in manufacture due to depleted stocks.

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AN IRON FOUNDRY

the consignment (or part thereof) being rejected by the inspector, be able to re-pack and consign to the supplier, working in conjunction with the purchasing department.

## Stocking Raw Material.

2. Raw material for manufacturing purposes must be stocked in such a way as will prevent deterioration, and, whilst monopolizing a minimum of space, will be readily accessible. The material must be racked so that it may be easily identified, thereby obviating mistakes and preventing delay. Material must be supplied to the manufacturing

## Storage after Inspection.

3. When details in process of manufacture are inspected after each operation, they must be accommodated until such time as the succeeding operation is put in hand. Such details must be received from the inspector, the quantity checked to the delivery note or work card, and held until such time as a fresh demand is made, when they should be promptly issued. With so much handling, it is imperative that no avoidable delay occurs, and special attention should be given to this section of the store, in order to

ensure expeditious handling and promptness in complying with the demand.

### Finished Parts.

4. Finished component parts are held in store against the demands of the assemblers, and issued in batches of complete sets, i.e. the whole of the details required in connection with a pre-determined quantity of assemblies. The order on the assemblers covers the assembling of, say, 20 units, which entails the issue of 20 sets of component parts from the store.

### Assemblies.

5. Definite section (or sub) assemblies are received into store, and re-issued when required in connection with the final erection of the unit. For the purposes of illustration, it may be assumed that the unit of manufacture is a motor car; the principal section assemblies being (*a*) the engine, (*b*) the gear case, (*c*) the rear axle, (*d*) the front axle, and (*e*) the steering box. The component parts for the assembling of each of these are issued from the finished component part store, and these, when assembled, are returned to store. In course of time the erection of the chassis has proceeded to the point of requiring, say, the engine or the gear case, and a demand upon the store ensures the issue, not of a miscellaneous collection of loose details, but of a complete engine or gear box, ready to be placed in position.

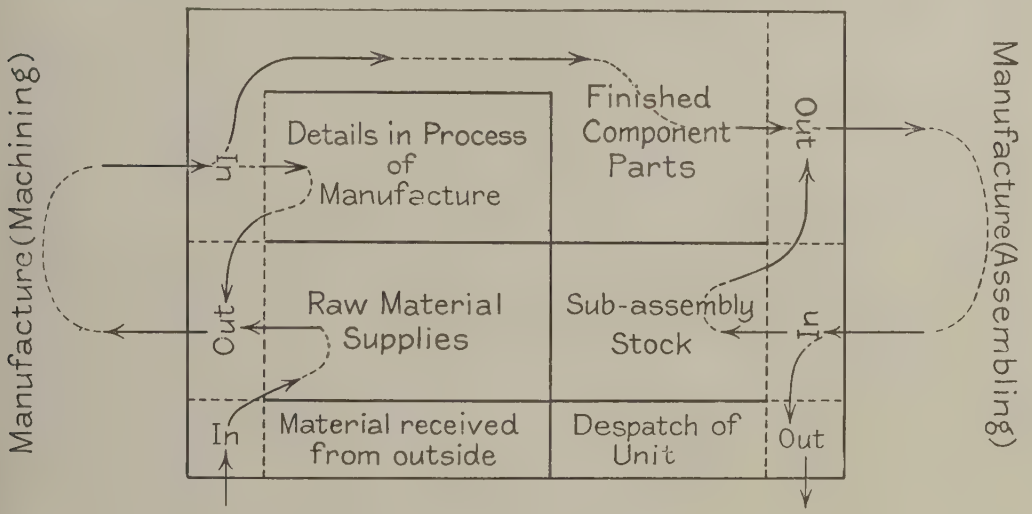


FIG. 52

### Finished Product.

6. The unit (e.g. a motor car) having been erected, is inspected and tested, and then held in the store temporarily until such time as delivery instructions are received, when it is handed to the despatch department. This, of course, refers to the product which, although ostensibly built for stock, is nevertheless sold whilst in process of manufacture. In the case of small manufactures of a standard design, these may be stocked in the commercial store or warehouse pending a sale, when they are withdrawn and passed to the despatch department upon receipt of the customer's order.

It will be seen from this that the functions of the store are many and varied, and each must receive due recognition. Whilst in some factories the central store (suitably sectionized) is favoured, in others a number of more or less independent stores are to be found in various parts of the building, the locality of each being governed by the duties involved.

### Central Store.

In the small factory the first method (illustrated by Fig. 52) is perhaps more often favoured, as this can be handled with a minimum of supervision. The whole is controlled by one man, who appoints working assistants for handling the various sections. If the volume of work is comparatively small, it is quite likely that, with the assistance of one or two intelligent labourers, the store-keeper can ensure efficiency, though even here it is necessary to invest each assistant with a certain amount of authority if the best results are to be attained. It is too often the case, in such a store, for the store-keeper to be overwhelmed with work, because the assistance at his disposal is of the

"fetch and carry" variety, each man doing just as he is told, and not attempting to anticipate or to display any initiative. Efficiency in this case is quite out of the question, for, whilst one man is taxed beyond the limits of his capacity, others cannot move without definite instructions, and are, as a consequence, unemployed for considerable periods during the day.

If the volume of work warrants, there should be one man definitely associated with the receiving of material from outside sources, and he must be responsible to the store-keeper for this side of the organization. He may, in addition to this, have the control of the raw material supplies section, so that the raw material from outside is received, is in each instance systematically handled. The direction of the arrow indicates the movements of material, and although in some factories the limited space allotted to the store will not permit of separate exits and entrances, the procedure can well be adopted in principle with the happiest of results.

## Independent Stores.

The second method of stores lay-out, as illustrated by Fig. 53, obviates the necessity of a central stores organization, and favours in its stead the establishment of independent units in different parts of the factory. It will thus be seen that the receiving store is situated close to

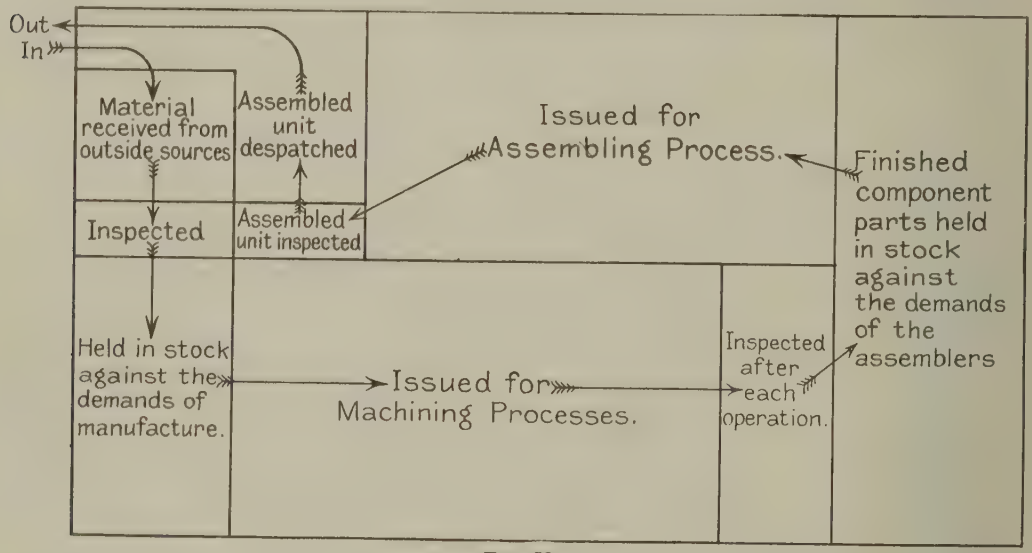
Out
In
Material received from outside sources
Assembled unit despatched
Issued for Assembling Process.
Finished component parts held in stock against the demands of the assemblers
Inspected
Assembled unit inspected
Held in stock against the demands of manufacture.
Issued for Machining Processes.
Inspected after each operation.

FIG. 53

checked, stored, and issued to the manufacturing departments by one man. The number of stores sections handled by one individual may vary in the different factories, according to the volume of work and the general procedure favoured, but the point to be emphasized is that the responsibility of each individual must be definite. If, say, three men are employed in the store, each should have definite duties to perform, so that efficiency is not impaired by the receiving (or the issue of material) being handled in a haphazard fashion by any one of the three who may happen to be available at the moment.

It will be seen from the illustration that the location of the store is between the machining and the assembling departments, and this should be insisted upon wherever possible, for by this means the issue of material, the return of the manufactured part, and the re-issue for assembling the factory entrance, with storage accommodation for material supplies adjoining. This is controlled by the "rough" or "material" store-keeper, who is concerned with the receiving of material, storage, and subsequent issue to the manufacturing departments. It will be observed that this method makes no provision for the storage of details in process of manufacture, the procedure being to deliver each batch of details direct to the section responsible for the operation following that submitted for inspection.

When the final operation has passed inspection, the details are received in the finished component parts store, which is under separate control. The store-keeper here is wholly concerned with the requirements of the assemblers, and to facilitate progress his store is located in close proximity to the assembling department. If the sub-assembly principle is favoured, such parts can be held in

store and re-issued when required, in the manner already described. The erected unit is passed to the inspector, and thence to the despatch department, which is again under separate control, although this department, by reason of its association with outside factors, adjoins the receiving store.

This method has been found to work with marked success, especially in the factory engaged upon the manufacture of heavy and somewhat slow-moving products. The illustration is designed to cater for the requirements of a comparatively small factory, but it can be extended to meet the needs of the larger factory, where the manufacturing departments are more numerous, and the products are of various types.

## CHAPTER XVIII

## STORES CONSTRUCTION

WHILST the location of the store is a matter which demands considerable attention, there are other factors which must not be overlooked, although it is feared that in many factories at least two of these factors do not receive the attention they merit. It is of no use insisting upon high-grade manufacture if the manufactured parts are allowed to deteriorate, and this must of necessity happen if the store is in any wise damp.

### Damp Stores.

It is well known that bright finished steel parts will rust upon the slightest provocation, and yet these parts are often held for considerable periods in a damp atmosphere. It is true that instructions are issued for such details to be greased before putting into stock, or treated with a rust preventer, but unless this treatment is repeated at frequent intervals the trouble is not eliminated. Sometimes the instructions are not rigidly observed and deterioration speedily follows; but even if the treatment is frequently applied this involves a good deal of expense which could be obviated if the store were a fit place to hold such details.

A damp store is not necessarily caused only by leaking roofs and the like, for many a building which is quite weather-proof is quite unsatisfactory for the storage of bright parts. If it is impracticable to change the location of the store, adequate heating facilities may be provided with a view to combating dampness.

### Lighting.

Lighting is the second factor which demands attention, and in this connection it is often the construction of the store which directly causes the trouble. The lockers are arranged in tiers, these reaching to a height of 10 or 15 ft., and no matter in what position the lamps are placed, a shadow falls across the bays, which renders working by artificial light extremely difficult.

The importance of adequate lighting facilities is recognized in the machining department, and this recognition must be extended to the store. It is difficult, without seeing the precise construction of the store, to put forth a definite remedy, but one point which may be emphasized is that the top of the lockers should not (in the centre bays, at all events) be more than 8 ft. from the floor. This would in all probability permit the installation of an arc lamp in the middle of the building, whilst an incandescent lamp at the end of each bay would ensure the proper illumination of the lockers in such a way as to make the contents clearly visible.

### Lockers.

If heavy stocks are to be held the lockers must be substantially constructed, and it is well to design each bay in accordance with the materials to be held. Lockers built against the outside walls may (if necessary) be constructed to a fair height, the structure leaning toward the wall, so that the bottom lockers are more roomy than those at the top. This not only serves to ensure stability, but also permits of the storage of heavy materials close to the floor, reserving the top bins for materials of lighter types.

If the product is of a somewhat heavy design, and is made in two or three sizes, one bay may be designed to hold the whole of the details involved, and this is particularly useful in the factory interested in several lines of manufacture, as the details for each type can be accommodated in a separate bay. When a bay is about to be constructed, the space allotted must be utilized to the best advantage, and in the first place the number of lockers required (allowing for each part number) must be ascertained. The next business is to determine the quantity of each detail to be stocked, and each locker must be designed to accommodate that quantity, taking into consideration the amount of space required for each specific detail.

In arriving at this conclusion, the best method of storing each detail must be ascertained, the size, shape, and peculiarities of each being considered. In the case of one type of wheel, the number to be stocked could perhaps be accommodated in the smaller space if the wheels were stacked, but as the design shows a projecting boss, this method of storing is not practicable, and more space must be provided to allow each wheel to rest upon its rim on the floor of the locker. In the case of a small detail of peculiar design, stacking may be out of the question, and these must either be "heaped up" in the locker or accommodated in small boxes; whilst in another case the detail is liable to damage in store unless adequately padded.

## Design of Bay.

The number of lockers required (and the dimensions of each) having been ascertained, the designing of the bay may now be proceeded with. Fig. 54 shows a rough design of a bay based upon the foregoing, and Fig. 55 illustrates the detailed planning of another bay. The first was designed for the storage of parts for two distinct lines of

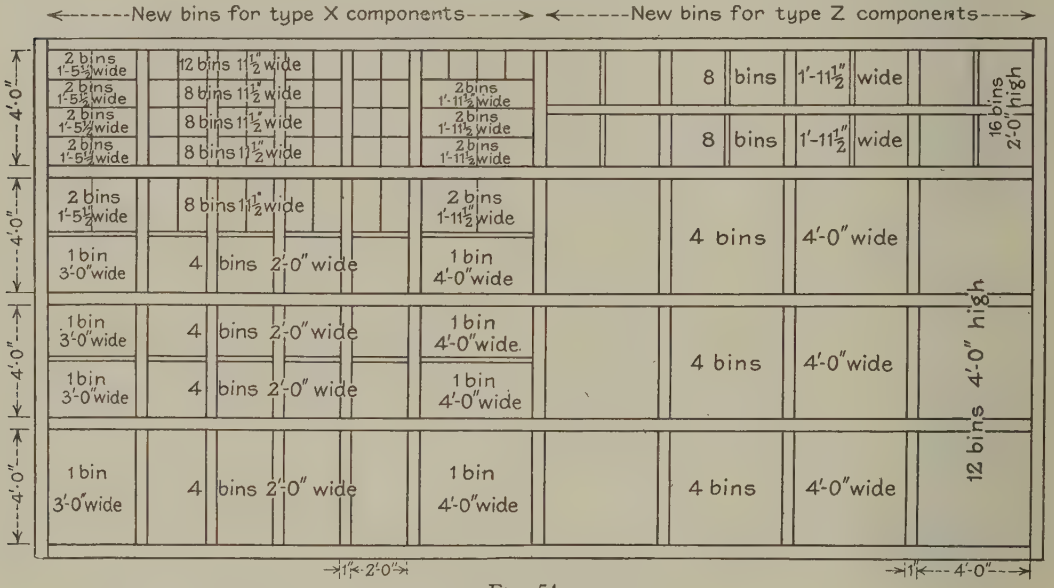


FIG. 54

ROUGH DRAFT OF PROPOSED NEW STORAGE BAY (*Not to Scale*)

| Distance Tubes | | | | | | | | | Roller Pins | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4⅞" | 5" | 5¼" | 5⅜" | 5½" | 5⅝" | 5 11/16" | 5¾" | 5 13/16" | 6" | 3 5/16" | 3 7/16" | 3⅜" | 3 11/16" | 3 13/16" |
| **Pin Bolts** | | | | | | | | | **Rollers** | | | | |
| 8" | 8¼" | 8½" | 8¾" | 9" | 9¼" | 9½" | 9¾" | 10" | 10¼" | 1 1/16" | 1 3/16" | 29/32" | 2" | 2¼" |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Plates Type A | Plates Type B | Plates Type C | Plates Type D | Angles 2⅜"×3 3/16"×2½" | Angles 2¾"×3⅝"×2½" | Angles 2¾"×3 3/16"×2½" | Angles 3"×5"×3" | Angles 3"×7"×3" |

| | | | | | |
|---|---|---|---|---|---|
| Wheels Pattern 370 Type A | Wheels Pattern 372 Type A | Wheels Pattern 376 Type B | Wheels Pattern 377 Type B | Wheels Pattern 382 Type C | Wheels Pattern 384 Type C |
| Wheels Pattern 390 Type D | Wheels Pattern 391 Type D | Wheels (SPL) Pattern 1003 Type A & B | Wheels (SPL) Pattern 1004 Type C & D | Vacant | Vacant |
| Frames (Front) Type A & B | Frames (Back) Type A & B | Frames (Front) Type C | Frames (Back) Type C | Frames (Front) Type D | Frames (Back) Type D |

FIG. 55

THE PLANNING OF A NEW BAY

manufacture, and the other, whilst in the main planned for one specific assembly, nevertheless provided accommodation for a few miscellaneous details which were not entirely associated with any one type of product.

## Racks or Shelving.

The factory may, however, be concerned with a product which involves the storage of a mass of small detail, and when this is the case solidly constructed lockers are unnecessary. Instead, racks or shelving may be built, upon which is placed small boxes containing the details, whilst again, in other factories, adjustable steel bins are introduced. These latter have the merit of being extremely durable, whilst they can be extended or reduced as circumstances demand. The steel constructed bins of the "tilted" variety not only ensure the contents being always visible, but they enable the handling of details to be done more expeditiously, and the manufacturer desirous of organizing his store may well give consideration to this type of bin.

## Reconstruction.

Before leaving this phase of store-planning a few words may be said concerning reconstruction. The two illustrations already dealt with refer to the construction of a new bay in a space not previously utilized, but it may be that, although more accommodation is necessary, the store is already apparently taxed to its utmost capacity.

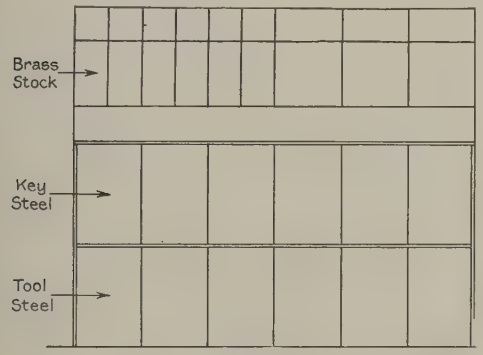


FIG. 56

RECONSTRUCTION OF AN EXISTING RACK

In one factory the manager was desirous of finding storage accommodation for tool steel and brass material, and after considering the matter for some time he found that he could secure ample accommodation by the reconstruction of an existing rack. How this was done is illustrated by Fig. 56, the heavy lines denoting the existing rack, which, in addition to its original function, was extended in the manner shown to accommodate all the tool steel and brass work in the factory.

## "Counter Work."

The sectionizing of the store has already been commented upon, but in this connection it may be well to observe that in the well-organized store there are issues which are to a large extent automatic and issues which may be termed spasmodic. The latter refer to sundries and details connected with the maintenance of the factory equipment, etc., such issues being made upon a requisition signed by a responsible person. This is known as "counter work," and one man should be set apart for handling such matters, in order that all demands may be executed without delay, and also to ensure that stores work in connection with production may be properly planned.

It is understood that all details received into the store must be counted and checked, and this cannot be efficiently handled by an individual who is constantly being called upon to supply sundries. No sooner is he in the midst of a fairly big count than his presence is demanded elsewhere, and when he is forced to leave such a job to attend to other matters accuracy is well nigh impossible. The man appointed for counter work may be given other duties to perform, if he has time at his disposal, but these duties should be such as will permit frequent interruptions without adversely affecting the issue.

## Finished Part Store.

The finished component part store may be divided into a stocking section and an assembling section, the functions of which may be summarized as follows: (*a*) The stocking section receives from the manufacturing departments all finished component parts, and holds these in stock against the demands of the assembling section. (*b*) The assembling section is concerned with the requirements of the fitting (or assembling) department, and is also concerned with the output of completed units. In this section, therefore, temporary storage accommodation is provided for a given number of complete sets of details, which are drawn from the stocking section and issued to the assembling department upon demand. By this method not only is delay obviated by reason of the parts being ready for issue at any moment, but the details being called for from the stocking section two or more weeks before they will be required by the fitting shop, any shortage will be detected early enough to allow for replacement to be effected without causing delay in manufacture. In other words, whilst this week the necessary supply of parts is in the hands of the fitters, next week's supply is intact in the assembling store, whilst the following week's supply is just requisitioned from the stocking section. If in certain instances this requisition cannot be met, the fact is speedily apparent, and pressure is brought to bear upon the machining department

which results in the parts being completed by the time they are actually required by the fitters.

## Clerical Work.

In the store proper, that is, the handling part, clerical work should be reduced to a minimum, which means that the storeman should not be expected to keep a number of records. If he is called upon to do this, the chances are that he will leave them until he has a few moments of leisure, and then it is probable that certain items will be forgotten. It has previously been suggested that in the small factory, at all events, records relating to stock might well be kept in the purchasing office, but if this is not practicable, then there should be a records section attached to the store, in charge of a competent clerk.

The storeman receives the requisition or other document authorizing the issue of material, and works in accordance with this, merely passing it to the records section when dealt with. In certain instances it may be necessary for him to weigh the material and enter particulars upon the requisition, but this should be the limit of his clerical activities, precise particulars of receipts and issues, together with the state of the stocks, being matters for the stock clerk and not for the store assistant.

# CHAPTER XIX

# STOCKTAKING

STOCKTAKING is rightly regarded as a matter of the utmost importance by the up-to-date firm, and the expense incurred in making it possible for the true value of material held to be ascertained is quite justified. Firms adopt various methods in this connection, but here it is proposed to deal with two of the most common methods, which may be termed (1) Perpetual and (2) Annual Stocktaking.

## Perpetual Stocktaking.

The use of the first-named brings into existence the individual known as the "perpetual stock-checker," whose sole duty consists in checking the actual stocks against the card records. Armed with a handy book of forms (*see* Fig. 57), he visits the store and the manufacturing departments, counts the contents of certain lockers or checks work in progress against the operator's work order, enters the particulars upon the form already described, and then checks these against the stock or progress card record, as the case may be.

The object of this form of stocktaking is to ensure the accuracy of the card records, so that these may be relied upon to furnish the correct data to the cost clerk at any time. It may be that the stock is valued but once each year, but this method obviates the necessity of closing the factory for a period for this purpose, which is a matter for consideration when the factory is working at full pressure, and it is essential to crowd in as many working days as possible.

Stocktaking in this instance resolves itself into a matter for the costing department, the stock checker's business being to ensure the accuracy of the ordinary records, so that these may be used for the purposes of valuation. It may be said that, without the checker, this desirable state of affairs would be well-nigh impossible, for it is notorious that discrepancies between the recorded and actual stocks are frequent, even in the well-organized factory. These discrepancies, too, cause a good deal of trouble in actual shop practices, for orders may be issued to the shops for which there is no suitable material, although the records show ample supplies.

The fact that the record is checked against the actual stocks at comparatively short intervals obviates trouble on account of discrepancies by bringing these promptly to the notice of the interested parties, and not only can an adjustment be made easily enough to avoid trouble, but a

**STOCK CHECK**

Date_____*9th October*, 192_____

AN ACTUAL COUNT TO-DAY SHOWS STOCK AS FOLLOWS:

| Bay | Locker Number | Drawing Number | Name of Part | Quantity | Remarks | Card Record Checked. | |
|---|---|---|---|---|---|---|---|
| | | | | | | Date | Checker |
| *A* | 1 | 361 | *Bracket* | 157 | *Finished* | 9/10/2_ | *J.C.* |
| ,, | 2 | 364 | *Cap* | 154 | ,, | ,, | *J.C.* |
| ,, | 3 | 365 | *Flange* | 223 | ,, | ,, | *J.C.* |
| ,, | 4 | 381 | *Support* | 211 | ,, | ,, | *J.C.* |
| ,, | 5 | 383 | *Lubricator* | 98 | ,, | ,, | *J.C.* |

If checking work in progress enter location in column headed "Bay," and the Order Number under heading of "Remarks."

FIG. 57

repetition of the error is likely to be avoided by a prompt investigation into the cause. In the majority of cases, discrepancies may be traced to carelessness, on the part of either the storeman or the record clerk, and if an investigation does not follow until the facts of the case are forgotten by those primarily concerned, the discovery of the real facts is very remote.

Though it is not expected that irregularities are existent in the store, it might very well happen that, at the expiration of twelve months (during which period the store-keeper has gone his way unchecked and without being called to account), many matters of a more or less serious import are brought to light. There may, in one instance, be too much material—in another, too little; whilst in a third there may be material or parts hoarded up which should have been disposed of. These facts are all brought to the surface at frequent intervals by the checker, and the significance of such is speedily apparent to those interested.

## Checking of Stores Material.

The checking of the material and parts in the store may be handled in consecutive order, based on the drawing number assigned to the parts, or it may be handled sectionally. In the first case, the checking of all details made to drawing number 100 would be followed by the checking of those made to drawing number 101, and so on until the whole range is completed, when the checking of the details to the first drawing number would again be handled. If the checking is done sectionally, it would commence with the section marked A, the contents of all lockers comprising this section being handled, when the activities of the checker would be removed to the section marked B, and so on. The size of the store, and the amount of material involved, would, of course, determine the interval elapsing between the first and second checking of any specific part, which may be three, four, or even six months. To be really effective, however, the contents of each locker in the store should be checked four times each year, or once in every three months.

Care must be taken by the checker to see that due allowance is made for those orders in connection with which the material appropriations have been made upon the card before the material has actually left the store. As an example, the 50 ft. of $\frac{5}{8}$ in. diameter mild steel for order No. 1,117 may have been deducted from the recorded stock slightly in advance of the actual material leaving the store, but during that interval the checker is engaged upon that specific material, the result being that, according to his checking, the actual stock is 50 ft. in excess of the stock shown upon the record. Before actually entering upon his form the amount of material in stock, he should peruse all orders in the store which are awaiting handling, and deduct the material required for these from the amount in stock.

## Work in Progress.

For checking work in progress the same form may be used, particulars of the actual amount of material, together with the operator's work card, being entered thereon, these particulars being afterwards checked against the card record relating to work in progress. In this he works systematically, handling all work in the turning section before going on to the milling section, etc.

## Advantages of Perpetual Stocktaking.

The advantages of perpetual stocktaking may be summarized as follows: (1) There is no necessity to close the factory for stocktaking; (2) the accuracy of all ordinary records is assured, so that the stock may be valued at any time; and (3) there are no special stocktaking expenses, the wages of the stock-checker being included with general stores expenses. These points commend themselves to many manufacturers.

## Annual Stocktaking.

The annual stocktaking is perhaps most generally in use, the procedure being to close the factory for a period of two or three days, during which all stocks are counted and entered upon special sheets, the extending and valuation being subsequently handled by the costing office, under the supervision of the accountant.

It is obvious that, if the actual stocktaking period is of short duration, the whole of the preliminary work (i.e. actual counting, etc.) must be done previously, the period being fully utilized for the business of "taking down." Some weeks before the actual stocktaking, therefore, the stores officials are busily engaged in "putting their house in order"; the contents of the lockers are counted, and particulars entered upon a special card (*see* Fig. 58), which is affixed to the locker, and upon

**STOCKTAKING**

1923

BAY ___A___ LOCKER No. ____1_____

| Date | IN | | OUT | | Stock |
|---|---|---|---|---|---|
| | Order | Quantity | Order | Quantity | |
| 24/2 | | | | | 131 |
| 28/2 | | | 583 | 30 | 101 |
| 17/3 | 721 | 100 | | | 201 |
| 28/3 | | | 749 | 5 | 196 |

Drawing No. ___361___ Name of Part ____*Bracket*___

FIG. 58

which is also entered particulars relating to subsequent receipts and issues, so that, when stocktaking actually commences, the final figure upon the card accurately shows the amount of material in the locker.

## Expense of Stocktaking.

The actual expense associated with stocktaking is ascertained by means of the issue of a special order (*see* Fig. 59), and a sub-order bearing the

**STOCKTAKING**
1923

All time spent in connection with Stocktaking must be charged against Order No.

S.T. 23

This number must appear upon every Worker's Order issued, and every worker engaged upon Stocktaking must have an Order issued to him, even though, for the carrying out of his ordinary duties, no specific Order is issued.

Signed_____*J. W. Wills*_____
Accountant.

FIG. 59

number of this special order is issued to every person employed upon stocktaking, this including the preliminary. The ordinary members of the stores staff can do a good deal of this preliminary work in conjunction with their usual avocations, and in their case the special order need not apply until the commencement of the recognized stocktaking period, unless overtime is resorted to in order to get the preliminary work completed.

It is the custom in many factories to draft into the store certain workers from other departments to assist in the preliminary work associated with stocktaking, and especially after ordinary working hours. Too often, however, the services of the lower paid workers are requisitioned, with a view to minimizing expense, but the result is not always satisfactory, especially in connection with the counting of the parts. It is far better to leave the matter as far as possible to the recognized stores officials, and assuming stocktaking to be at the end of March, the preliminary work can commence as early as the end of January, in which case it will be found that very little outside assistance is necessary.

## Obsolete Material, Etc.

During a period of twelve months it is possible for questionable material to accumulate—various changes in the methods of manufacture have taken place, and certain parts have become obsolete. All questionable material should, during the preliminary period, be submitted to the inspector, and not re-admitted into the store until it has been classified in relation to present-day circumstances. It is important that nothing is included in the stock valuation which is not of real utility worth—all scrap must be disposed of, and when stocktaking actually commences everything should be absolutely straightforward.

## The Accountant's Responsibility.

Everything being ready by the appointed time, stocktaking should be handled without a hitch. The chief store-keeper for the nonce gives place to the accountant, who takes full control of stocktaking, and is responsible for all allocation of labour. It is a mistake to leave the store-keeper in charge during this period, for really he is being called to account for his stewardship, and the investigation must be handled by a disinterested person, or, rather, a representative of the firm in a financial capacity.

## Programme.

The store is divided into sections, and the stocktaking in each section is conducted by two persons: the "caller" and the "taker-down." The former is preferably a storeman, or at least one who is familiar with the details, whilst the latter is a clerk nominated by the accountant. A programme is drawn up (*see* Fig. 60) showing the allotment of

**STOCKTAKING, 1923**
SCHEDULE OF SECTIONS AND ALLOTMENT OF DUTIES

The persons whose names appear below have been selected for the duties outlined, and will perform the same under the direct supervision of the Accountant, from whom all instructions must emanate, and to whom all communications must be addressed. No person is expected to interest himself in any matter outside his own Section, and when work in that Section is completed, the Clerk and the Caller must promptly report themselves to the Accountant.

| DEPARTMENT | SECTION | CLERK | CALLER |
|---|---|---|---|
| *Stores* | *Bay A* | *J. Green* | *P. Jones* |
| *Stores* | *Bay B–F* | *H. Blank* | *F. Cross* |
| *Stores* | *Bay G–P* | *W. Jones* | *G. Jordan* |
| *Tool Stores* | *All* | *F. Frankton* | *T. London* |
| *Machining* | *Capstan Turning* | *W. Wells* | *B. Turner* |
| *Machining* | *Milling Drilling Grinding* | *J. Green* | *B. Turner* |
| *Assembling* | *All* | *W. Wells* | *C. Dipper* |

FIG. 60

officials, so that every one knows what he has to do, and stocktaking can commence simultaneously in several sections. The "taker-down" is nominally in charge of his section, and he must see that nothing is overlooked. The "caller" marks with chalk each locker as it is dealt with, and when the section has been completed the whole is surveyed by the accountant. On no account should there be any overlapping, for by this means entries may be duplicated or certain stocks quite overlooked. The drafting out of a programme similar to that mentioned, as well as the provision of the stock sheets in the manner about to be described, will obviate trouble in this direction.

## Stock Sheets.

The stock sheets are prepared in advance, and entered thereon are the locker numbers and the names of the details contained therein. This enables the stocktaking to be handled expeditiously, for only the quantity has to be entered in each case, and it also guards against duplication. The "caller" uses the special card already described, calling out the locker number, quantity, and the name of the part; the locker number and the name of the part being merely verified by the "taker-down," and the quantity entered in the column provided for the purpose. A prepared stock sheet is illustrated by Fig. 61.

## Tool Store.

Whilst stocktaking is proceeding in the store proper, other sections of the factory are receiving attention, notably the tool store and the manufacturing departments. So far as the tool store is concerned, stocktaking resolves itself into a record of new, or comparatively new tools, but not including jigs, fixings, or other tools more directly associated with the factory plant or equipment. If stock is taken of this, it is handled separately, but many firms who have an annual stocktaking exclude the factory equipment from their records, the accountant valuing this from his own records, allowing for depreciation, etc.

## Work in Progress.

Just prior to stocktaking, all movements are stopped in connection with work in progress, and the stock is taken in the department in which the material is to be found. The section foreman is responsible for placing each batch of material in an accessible position, with the operator's work order in close proximity. The position of the material determines the enhanced value on account of operations performed, for the fact that a batch of details is found in the drilling section, which in the ordinary course of events must be turned and milled before the drilling operations can be handled, shows at once that those two operations have already been completed, and the value can be calculated accordingly. It may be, however, that part payment for the drilling operation has been made, this being ascertained by a perusal of the operator's work order, and if this is the case, the amount paid must be entered upon the stock sheet.

Before manufacture can be resumed, all such records relating to stock or work in progress must be checked with the stocktaking figures, and as each sheet is completed it is handed to the clerks for this purpose. When at length stocktaking is completed and all records adjusted, the sheets,

**STOCKTAKING 1923**

SECTION_____*Bay A*_____

| Location or Locker No. | [1]Quantity | Drawing No. | Name of Part | [2]Condition (state if rough, partly finished or finished) | Value per Piece | Total Value |
|---|---|---|---|---|---|---|
| 1 | | 361 | *Bracket* | *C* | | |
| 2 | | 364 | *Cap* | *C* | | |
| 3 | | 365 | *Change* | *C* | | |
| 4 | | 381 | *Support* | *C* | | |
| 5 | | 383 | *Lubricator* | *C* | | |
| 6 | | 394 | *Lever* | *C* | | |
| 7 | | 399 | *Catch* | *C* | | |

[1] For raw material in bulk (Steel Bar, Sheet Metal, etc.) give Weight. For tube (in bulk) give Measurement.

[2] Rough, "*A*"; Partly Finished, "*B*"; Finished, "*C*." State last operation finished after "*B*."

Stock taken by_____ Accepted by_____ Records adjusted by_____

Extended by_____ Checked by_____

A STOCKTAKING SHEET PREPARED IN ADVANCE FOR ACTUAL "TAKING DOWN."

FIG. 61

signed by the "taker-down," are handed to the accountant, who subsequently arranges for values to be entered against each item by the cost clerk, and in due course the total value of all material in the factory is ascertained.

### Value of Raw Material.

So far as raw material values are concerned, these are usually computed upon the present market price, although in some instances the actual buying figure is used. Much depends upon the fluctuations of the market, and care must needs be exercised to ensure the real effective value being ascertained. If the present price is much below the buying figure, a decided loss is shown if the value is based upon the former, whilst the present-day enhanced price may in some circumstances be an equally unreliable basis. The matter must be considered in relation to the circumstances governing the purchase, and with a shrewd insight into the future, as well as a thorough knowledge of the present state of the market.

CHAPTER XX

## KEEPING THE WORKS MANAGER INFORMED

THE works manager, if he desires to really manage the factory, must be in possession of information set out in such a form as to render it intelligible at a glance. He has no use for a voluminous mass of detail, purporting to give particulars of the position up to date, for he cannot afford the time to grapple with intricacies in order to determine how the matter really stands. What he wants is a clear and concise statement embodying all points of real interest, a brief perusal of which will enable him to grasp the facts of the case and show him precisely that which is affected.

*By permission* *Messrs. Gillett & Johnston Croydon*

A BELL FOUNDRY

### Responsibilities of Works Manager.

The modern works manager has little time for detail, for his responsibilities are many and varied,

and experience has taught us that the man immersed in detail cannot direct and control efficiently. There is a limit to the capacity of every individual (in what can be crowded into a specified time), and the manager who is forced to work out the detail concerning one phase of his organization must of necessity neglect some essential in another direction, which may have far-reaching consequences.

The works manager must be the factory director, for he is in supreme control of every phase of the organization, and he must be quite as familiar with one as with another. He cannot afford to concentrate upon machining problems and leave those associated with assembling to other people, and he cannot interest himself in rate-fixing, if by so doing he has no time to study deliveries. He may be a specialist in one direction, but there are other matters which demand his attention, and it must be remembered that his business is to efficiently control an efficient organization, embracing the entire factory.

## Delegation of Responsibility.

It is with this end in view that responsibility is diffused throughout the factory, and the modern manager does not attempt to "bite off more than he can chew." He does not set out to handle the detail associated with the machining department, for there is a foreman whose time is fully occupied in this direction, and were the manager to undertake these duties his time would be fully occupied also, and other matters would go by default. He therefore entrusts the interests of each of his manufacturing departments to the foremen of those departments, and the interests of his administrative departments to their respective heads, making arrangements whereby he is fully conversant with the activities of these people, holding himself at their disposal in the matter of advice and instruction, whilst maintaining the *rôle* of critic when necessity arises.

## Broad Issues.

But although in direct contact with the heads of the various factory departments, the matters which engage his attention are upon the broad issue, as affecting the factory as a whole rather than the specific department. He takes the machining foreman to task because inferior workmanship affects the product associated with the factory, or because delays are affecting the factory output; whilst, if his advice is sought, this is given with due regard to the effect upon the factory as a whole.

He must have leisure to reflect—to construct—and this is impossible if he is continually assailed by his subordinates in the quest for advice or instruction, or if, when desiring information concerning a specific order, he has to demand particulars from every foreman having any interest in that order. Everything must be systemized and summarized before it reaches him, so that he can get at the kernel without cracking the shell, but as the cracking is a necessary preliminary it must be done by someone.

## The Works Office.

This brings into being the works office, a semi-technical clerical organization which virtually controls the works, acting as the manager's mouthpiece on the one hand, and his information bureau on the other. This organization can be restricted or expanded as circumstances demand, but no matter how large or how small the factory may be, a central controlling department is necessary to ensure the efficiency both of the factory and of the manager.

The most effective works office is (under the modern system of factory organization) undoubtedly the progress department, for, output being the predominating factor, it is obvious that the department specializing in this direction must of necessity be in close touch with practically every matter which is of interest to the works manager. The latter is guided almost entirely by the output and delivery charts which are designed to show the precise position at any time, and if these are clear yet comprehensive, as well as being absolutely reliable, he is able to get at the kernel without the preliminary cracking, and wasted time and effort are accordingly eliminated.

## Records.

It is obvious that, for the exact position of every order to be ascertainable at any moment, a certain amount of record-keeping is necessary, charts, tables, and card records being used in various circumstances. This does not mean, however, that the manager is obliged to wade through these variegated records in order to get at the facts of the case, and so a summarized version is prepared for his use. Let us see how the matter works.

The delivery chart, illustrated by Fig. 62, is drawn up in the progress office, in accordance with the instructions of the manager. The manufacturing departments have been planned to produce a given monthly output, and so the output from the factory over a period of, say, twelve months can be estimated. It will be observed that several types of manufacture are involved, although the variation (from a manufacturing standpoint) is but slight, and whilst in some cases orders for two or more types are running through the shops simultaneously, orders for others follow the completion of those, so that output for a given period is sustained.

The output the factory is called upon to achieve each month is shown upon the chart, and this is all that appears in the first instance. At the end of each month, however, the actual achievement

**DELIVERY CHART**

| Quan. | Type | | Dec. 1921 | Jan. 1922 | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. 1923 | Feb. | Mar. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 gone 40 | CA | Promised | 20 | 10 | | | | | | | | | | | | | | |
| | | Delivered | | | | | | | | | | | | | | | | |
| 25 | CB | Promised | 4 | 21 | | | | | | | | | | | | | | |
| | | Delivered | | | | | | | | | | | | | | | | |
| 100 | CD | Promised | | 5 | 15 | 25 | 30 | 25 | | | | | | | | | | |
| | | Delivered | | | | | | | | | | | | | | | | |
| 50 | CE | Promised | | | | | | | 20 | 20 | 10 | | | | | | | |
| | | Delivered | | | | | | | | | | | | | | | | |
| 200 | CF | Promised | | | 5 | 15 | 15 | 15 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 10 | | |
| | | Delivered | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | Total for Month | Promised | 24 | 36 | 20 | 40 | 45 | 40 | 40 | 40 | 30 | 20 | 20 | 20 | 20 | 10 | | |
| | | Delivered | | | | | | | | | | | | | | | | |

Fig. 62

must be inserted, and this shows the manager at a glance the difference (if any) between the estimated and the actual output. The insertion is made by the progress clerk from information derived from the assembling department or despatch office, whichever may be the most convenient.

It will be observed that the chart gives but a bald statement of facts, and that no amplification is shown, but this is all that is required at the moment. Many ingenious charts have been devised to cater for the broader issue, by making brief mention of the reason, but even these are by no means complete, and must be supplemented by more detailed information. Further, these "ingenious" charts lack the simplicity of the one described, and are frequently misleading, for whilst the chart ostensibly proves that a certain department is responsible for the delay, it does not show the factors involved—factors over which the presumed defaulting department may have no control. It has been proved time and again that detail destroys the effectiveness of the final chart, and the attempt to make it "all embracing" ends in disaster. It is better to have a number of detail records, each record dealing with a specific object, and compiled in such a way as to permit summarizing, which finds expression in the final chart.

A glance at the chart will show the manager the state of affairs in regard to output, and assuming that the actual output for the month conforms with the estimate, he has no need to take action. If, on the other hand, the actual output is below the estimate, or one type of manufacture is in excess of the requirement, whilst the other is as much below, the need for action is at once apparent, and more detailed information is demanded.

It is to the works office that the manager turns for information, for here are the detail records, dealing with every factor involved, and compiled impartially and without bias. He knows that the information thus submitted is reliable, and may be regarded as authentic; and after a perusal the position is quite clear to him—he knows the trouble, and what must be done to remedy it.

## Where There is no Works Office.

This is far more effective than the calling together of the foremen of the whole of the departments involved, with a view to locating the source of the trouble, and is more economical besides. Let us assume for the moment that there is no works office in existence, and that the first intimation that output is not being maintained emanates from the sales office. When this is the case it is obvious that the trouble is fairly well established, and that, whatever action the manager may take, it can only deal with the future and cannot have any effect upon what has already occurred. In other words, the intimation arrives too late for anticipatory action, and this in itself condemns the method employed.

But the intimation being received, action of some sort must be taken, and in the first instance the manager may call upon the assembling shop foreman for an explanation. This individual may easily exonerate himself from all blame by stating that his output is restricted by the inadequate supplies of material received from the machining department, but by making this statement the foreman of the latter department is implicated, and he in turn is called upon for an explanation.

the exasperated manager are often hurled at the least offending party. Added to this, the time wasted is enormous, and the foremen return to their respective departments after an absence of an hour (or even longer) to find that fresh troubles have made their appearance—troubles which could have been obviated had the foreman been available to deal promptly with the matter.

This is an illustration of inefficient management, and it shows, too, the absolute necessity of a works office. The employment of a progress man,

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AN ENGRAVING DEPARTMENT

Now it is obvious that, no matter how culpable he may be, any foreman will seek to defend himself, and the excuses he offers are so plausible that the manager has the greatest difficulty in fixing the responsibility. Many factors are involved, other departments are indicted, and the conflicting statements made (most of which, from the standpoint of the individual, contain more than a grain of truth) bewilder and exasperate, and the meeting degenerates into a first-class wrangle, the consequences of which are hurtful to business efficiency. Each individual is convinced that he is right and that the others are wrong, and the criticisms of

assisted by one or two junior clerks, will in the course of a year effect a saving of several hundred pounds by rendering unnecessary the frequent calls of the foremen to the manager's office, apart from the effective value of the actual duties performed. By means of the records compiled, every factor *likely* to have an adverse effect upon output is automatically brought to the surface long before the possibility has become an established fact, and there is every reason to assume that, if prompt action is taken, the greater number of those possibilities can be effectively handled before they become really dangerous.

### Necessity for Works Office.

The works office is the manager's most valuable assistant, and must form part of the organization of even the smallest factory. It may be that one man can handle the whole of the duties involved, or it may be that this man must have a certain amount of clerical assistance, but, whatever may be the composition of the department, it must have definite functions, and enjoy official recognition. It may be termed the "Works Office" or the "Progress Department," but it must be a real live force. Further details concerning the working of such a department are given in the succeeding chapter.

## CHAPTER XXI

## RECORDING WORK IN PROGRESS

THERE are still many manufacturers (most of them in a small way of business) who "have no time to bother with record keeping," and who are content to rely upon the memory of the individual. This individual (who may be employed in a somewhat humble capacity) can always be relied upon to remember what the factory output was in 1912, the procedure adopted five years ago in connection with a special job similar to the one which is now exercising the mind of the management, and other matters of importance which claimed attention in bygone days.

The manufacturer rates highly the merit of this achievement, and contends that, as in those days the factory was run without records, there is no need for records in these. As manager of his own little factory, he claims to have an intimate knowledge of everything appertaining to that factory, this knowledge being derived from the personal statements of his subordinates. He may say that he does not accept every statement at its face value, and that accuracy is ensured by investigation, but this in itself condemns his system, seeing that the manager himself must conduct the investigation, in connection with which time must be spent.

It is not remarkable that an intelligent individual remembers (after a lapse of several years) one or more matters of outstanding importance, and perhaps most of the details in connection with those matters, although here he may err in one or two particulars, but it would be remarkable were the individual able to commit to memory the details associated with the numerous matters of greater or lesser importance which are continually engaging his attention. Constant association will to a great extent assist the memory in regard to precedent, but this will not cover every particular involved, and unless certain facts are committed to paper, errors and omissions will most certainly follow.

### The Value of Records.

The record ensures the availability of information, not only for the person primarily concerned, but also for his successor, and for those whose interest (although possibly more indirect) is very real. The individual may, at the completion of a job, compile from memory a statement dealing with that job, but that statement will not compare with the one compiled from the records which were made contemporary with the job, for in conning these records half-forgotten incidents come to the fore and enable the individual to prepare a statement which reflects quite accurately every circumstance associated with the job.

### Planning the Records.

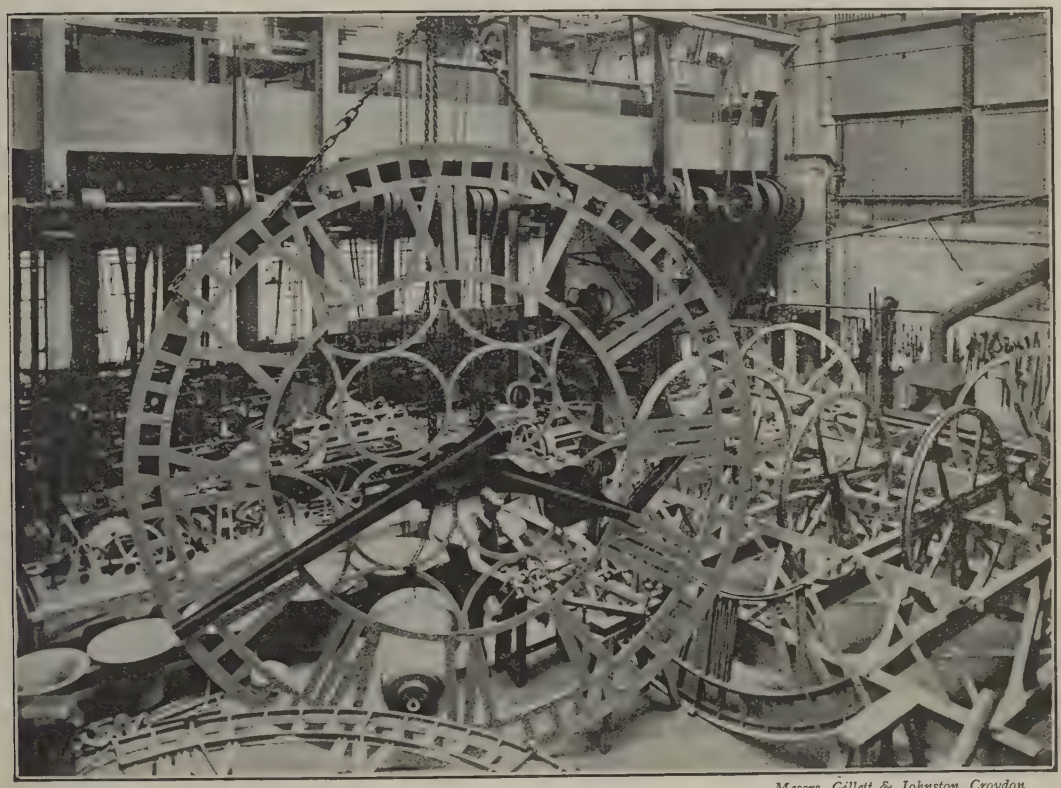
It is safe to say that no one attempts to rely upon memory alone, and even the most fervid record hater does not disdain to use a pocket-book, or even scraps of paper, to record particulars of more than usual interest. It is such records which enable the individual to "memorize," but however valuable they may be to him, they are of little value to the factory as a whole, and this is the factor which counts. Record keeping must be officially recognized and systemized, and designed to benefit the factory as a whole, and not merely a certain individual.

The design, then, must come from the top, i.e. the management, and form part of the accepted system. A classification of the records it is desired to keep must first be made, and planning is as necessary here as in the manufacturing departments. It may be that the management officially recognizes certain records, but that these are supplemented by other people, either because the official records do not cover sufficient ground, or because they are unwieldy and necessitate close perusal, or may be calculation, before the real facts can be ascertained. This means that the records have been hastily devised, without due regard being paid to the circumstances, and so we get official and unofficial records operating in the same factory, causing a certain amount of overlapping which could have been obviated had the official records been planned to cover every contingency.

The design of the record is governed to a certain extent by its function, and also by the general system operating in the factory, and so there are charts, tables, graphs, and schedules where a number of items are involved, or where comparisons are desired, and cards for individual parts or units. Even so, the choice is exceedingly wide, and if the general factory system favours a standardized card filing cabinet, practically every record can be accommodated therein. The specialist firms dealing with record systems have

standardized methods for handling any type of record, and are prepared to visit the factory and install the system most suitable for its requirements.

But in considering the records which may be kept in the works (or progress) office, we have to bear in mind that these are for the purpose of tabulating matters of works interest, with a view to facilitating production by showing (1) what has been done, (2) what is being done, and (3) why more cannot be done. We have already dealt with the record for the works manager's information, which is but a summarized statement, and we may now briefly deal with the detail records from which this summary is obtained.



*By permission* *Messrs. Gillett & Johnston, Croydon*

AN ERECTING SHOP

## Order Records.

In the first place there are orders in the office for the units set out upon the delivery chart, each order covering a definite quantity. To handle the matter in its most simple form we will take for the purposes of illustration the order for 25 C.B. units, and show the procedure in regard to this, bearing in mind that similar treatment is accorded the other orders.

An order is received to cover the manufacture of 25 C.B. units, four of which are to be despatched in December, and the balance (21) during the following month. It has to be observed that there is already an order in process of manufacture covering 40 units, 20 of which must be despatched during December, so that manufacture in connection with the new order must be to some extent contemporary with the old. It is assumed that the shop planning has made provision for this.

The order merely states that 25 units are required, but in all probability each of these units is comprised of a hundred or more details, each of which must be subjected to a number of manufacturing operations. A specification or part list, giving the drawing number and name of each detail, together with the class of material from which it is to be manufactured, is sent to the works office, and from this the necessary material requisitions are made out.

The operation tickets must next be issued, but for this to be done it is necessary to know what operations are necessary, and the price (or time) allowed for each operation. This is made possible by reference to a card record setting out the operations (in the correct sequence) for each detail.

## Records of Material.

The preliminary work having been completed, actual manufacture commences, but it is necessary now to record the movements of each detail, so that its precise whereabouts may be located at any time. This is necessary for a variety of reasons, the chief one being to enable the progress man to see what parts are lagging behind, and in what department or section the hold up occurs. This is important, for it is often the means of discovering the weak link of the organization, as if the records show that delays are frequent in one specific section, it is obvious that there is something wrong with that section, and action by the management is imperative. Apart from this, however, the prompt locating of the part is sometimes necessary to avoid the issue of supplementary instructions relating to a change of process or design, as an enquiry will elicit the fact that the part in question is beyond the stage where a change can be effected, and that, if the change is insisted upon, the scrapping of the part will follow.

Many firms use for this purpose a progress record card, upon which is shown the operations in the correct sequence. The receipt of the operation ticket (signed by the foreman and the inspector) in the works office is accepted as proof of the operation being completed, and the record card is marked accordingly. Thus, if the operations upon the card read as follows, viz.—"Turn., Mill., Drill.," the issue of the first operation ticket would cause the reading to be thus: Turn. 25 Mill. Drill, the receipt of the turning operation ticket, thus: Turn. 25 Mill. 25 Drill, and so on, until the final operation ticket is returned completed, when the record would read thus: Turn. 25 Mill. 25 Drill. 25, this showing at a glance that the detail had been sent to the finished part store.

## Chart Showing Position of Job.

But whilst this record deals efficiently with the movements of the specific detail, a chart is necessary to show at any time the precise position of the job as a whole. It must be remembered that the order is concerned, not with the details, but with the completed unit, and that, in order for the manager to be quickly in possession of the facts relating to the output as shown upon the delivery chart, a record must be in existence which will obviate the necessity of wading through the 100 or so record cards with a view to discovering which details are lagging behind. In other words, the manager, noting that the actual output for the month falls short of the estimate, requires to know the reason, and he does not expect to wait for two or three hours whilst the progress man completes a statement from his detail records.

A chart, similar to Fig. 63, is therefore kept in the works office, and when the completed ticket relating to the final operation of any detail is received (this denoting that the part in question has been completed and sent to the finished part store) the fact is duly recorded upon the chart in question, so that, when information is desired by the manager, a glance at this chart will at once show the backward detail, and reference to the record card bearing the drawing number of that detail will show the exact position.

Further, the chart enables the progress man to keep a watchful eye upon any part which is lagging behind, for, knowing that at least four units must be despatched during December, it is obvious to him that four complete sets of details must be in the hands of the assemblers, say two (or may be three) weeks before the end of that month.

**COMPLETED COMPONENT PARTS**

ORDER____25 *Type C.B. Units.* DELIVERY____*4th December.*_____*21st January*___

| Drawing No. | COMPLETE MACHINING: Name of Part | No. per Set | *16th Dec.* Sets 1–4 | *23rd Dec.* Sets 5–10 | *30th Dec.* Sets 11–15 | *6th Jan.* Sets 16–20 | *13th Jan.* Sets 21–25 |
|---|---|---|---|---|---|---|---|
| 101 | *Cylinder* | 2 | √ | | | | |
| 102 | *Valve* | 8 | √ | | | | |
| 103 | *Crankshaft* | 1 | | | | | |
| 104 | *Plate* | 1 | √ | √ | | | |
| 105 | *Set Screw* | 1 | √ | √ | √ | √ | √ |
| 106 | *Bolt* | 4 | √ | √ | √ | √ | √ |
| 107 | *Crankcase* | 1 | | | | | |
| 108 | *Cover* | 1 | | | | | |
| 109 | *Connection* | 2 | √ | | | | |
| 110 | | | | | | | |

FIG. 63

A glance at the chart will elicit the fact that, whereas certain items show 25 details completed, and other items 15, 10, and 4 respectively, in one or two cases not a single completed part is shown upon the chart, and it is upon these that he must concentrate. Turning up the record card in each case, he discovers the present location and also what operations remain to be done, and it is the latter factor which decides his course of action. In one case the one outstanding operation is a comparatively simple affair, which can be handled in a few hours, but in another there are two, three, or more operations yet to be completed, and it is in connection with these that his immediate attention is required. It is probable that, if prompt attention is forthcoming, the parts can be completed early enough to obviate delay in assembling, but, on the other hand, it may be that extraordinary measures must be taken to obviate delay, and in this case the intervention of the manager is sought.

One of the principal functions of this chart is to obviate the necessity for extraordinary measures by drawing attention to the danger at the earliest possible date; but if, despite every precaution, the necessity cannot be avoided, then the chart and the card record between them give the information which automatically suggests the remedy. Such records as these are absolutely indispensable and are of real value to the busy manager.

## CHAPTER XXII

## CENTRALIZED CONTROL

The works office, receiving instructions and information from all sources, and transmitting the same to the people directly interested, exercises a wholesome influence over the shop organization, and in every modern factory it is an established feature. The simplicity of the routine makes an appeal to the shop foremen, for they know just where to look for instructions, and are not confused by conflicting demands from a variety of sources.

### Works Office Routine.

The works office represents on one hand the management, and, on the other hand, the factory. Data is collected covering matter of departmental interest, which shows the degree of efficiency and effectiveness reached by every phase of the organization, and this influences the actions of the works manager, the factory planner, and every other official entrusted with a measure of responsibility. On the other hand, the commercial side of the organization, when issuing instructions to the works, is not concerned with sectional divisions, but with the works as a whole, and in issuing all instructions to a central works office a good deal of unnecessary labour is avoided and a greater amount of satisfaction achieved.

The department foreman receives from the works office all instructions relating to the order in which he is interested, and he is not bothered with matters relating to orders with which he has no concern. From the works office he receives all operation tickets and material requisitions, together with the time or date for completion, and he does not expect to receive a visit from the sales manager in quest of information concerning a specific job, or a visit from the cost clerk in respect to the cost of a job. Such enquiries are received in the first instance by the works office, and if the information desired cannot be ascertained from the data already collected, it is the progress man who solicits the required particulars from the foreman.

### Prevention of Wasted Time.

The sales manager and the cost clerk both benefit under this procedure, for, with manufacture sectionized to get the maximum output at the most economic cost, it is only through the medium of the works office that the true position can be ascertained. Without the works office, the sales manager, desirous of knowing the progress made by any order, must needs first visit one section and then another, and even when he has completed his round of enquiries it is by no means certain that he is in possession of the true facts of the case. He is told by the assembling foreman that certain details are wanted from the machining department, and various sections in this department must be canvassed before the one immediately interested is found. Then it transpires that the necessary material has not been received from the store, and so the journey is continued, only for the pilgrim to find that the material has not been received from the outside supplier, which means a continuation of the journey to the purchasing department.

The procedure may be reversed, but the general effect is the same—wasted time so far as the sales manager is concerned, and the distraction of the various foremen interrogated. It may be contended that this is a very extreme case, but even if the limiting detail is located earlier a good deal of unnecessary work is involved in this round-about procedure; whilst in some cases wasted time is intensified by incorrect information afforded—the detail which is presumably wanted from the machining department being actually in the assembly store, etc.

All this waste of time is obviated when application is made to the works office, for the information desired can readily be given from the records and may be accepted as absolutely reliable. The cost clerk, too (although his enquiry is of a sectional character and, therefore, not so involved), can as a rule get the information desired more expeditiously through the medium of the works office, and, as no advantages are to be derived from

direct application to the shops, the busy foreman, intent upon economical manufacture, should not be called upon to answer questions which can be just as easily answered by the office man.

## The Information Supplied.

The foreman then relies upon the works office for all instructions in regard to manufacture, and should he desire further information he knows just where to apply. The records in the office are at his disposal, and should he desire to know the amount of scrap made in his section, the volume and nature of the work following along, the sequence in which the orders now in his section are required, or other information of a like character, this can be accorded him in a few minutes. He is not required to spend half the day in other departments in search of information—his work lies in his own department and he is well content that it should be so.

## Planning by the Foreman.

It will usually be found in the small factory that scientific production planning (i.e. the pre-determining of the specific machine for the operation) is not insisted upon, and that the planning must be done by the foreman. The terms of the operation, as given upon the work ticket, indicate the class of machine upon which the work must be handled, but as in many instances there are several machines which can handle the work it is left to the foreman to decide upon the machine for the specific job. In some cases it is quite immaterial upon which one of a group of machines the job is handled, as all are of equal capacity, but in other cases the time allowance for the job is the deciding factor, as, although the operation can be handled upon two or more machines, the result is not precisely the same in each case.

To get the maximum output from his department the foreman will plan the work so that each machine is supplied with the work it can most efficiently handle, which means that, no matter what may be the time allowance in each case, bonus is always earned by the operator. On the other hand, it is essential that the work is put through in the order required, and in some cases, with a view of obviating delay, the machine entrusted with the job is not really the best for the purpose. It can do the work, but another machine could do it better; as, however, the latter machine is already occupied with other important work, and the job in question cannot wait until this has been completed, other arrangements must perforce be made to deal with the job, and the vacant machine of a somewhat inferior capacity is utilized.

Whilst there are times when this procedure is unavoidable, every effort must be made to guard against abuse, for when the time limit is exceeded on any job (or even if the maximum bonus is not earned) the output from the department suffers. The foreman, therefore, should be given every assistance, so that he is enabled to plan ahead and thus utilize his resources to the utmost, and this is made possible by the institution of a programme setting out the work in the order required. Such a programme can be issued by the works office in the form of a precedence list.

## Issue of Precedence List.

The issue of a precedence list is of the utmost assistance to the foreman, for it shows him exactly what is required, and he is thus enabled to give priority to the most important jobs by putting them in hand in the correct sequence. The procedure is largely automatic, and ensures due regard being paid to the claim of every order early enough to obviate the necessity for "urgent messages" and the "eleventh hour" rush which is so prevalent in many factories. The foreman is not worried every few minutes by the questions of the progress chaser, neither does he have to peruse innumerable scraps of paper, each stressing the urgency of one specific order. As the material is available the order appears upon the list, and the foreman is each day able to see the extent of his commitments and can plan accordingly.

## Foreman's Entries on Precedence List.

When the list is first received it is perused by the foreman, who enters in the "Remarks" column opposite to the item concerned such observations as "In hand," "Not started," "Waiting for tool," "Further instructions necessary," whichever is applicable to the specific job. The remarks in the column are amended when the conditions which gave rise to the original observations have changed; "In hand" appearing in place of "Not started," "Waiting for tool," etc. When the work is completed and has actually left the department the date is entered in the "Completion" column, whilst the "Date promised" column is used by the foreman only when a mark denoting special urgency appears beside a specific item.

All precedence lists are collected daily by the progress man, and the observations made by the foreman dealt with where necessary, and each list is revised, new jobs being added; whilst those completed are cancelled and transferred to the list covering the succeeding operation. For example, the job may appear in the first instance upon the turning foreman's list, as turning is the first operation, but when this has been completed the job appears upon the list of the foreman responsible for the next operation, which may be milling.

If a foreman is responsible for more than one operation, such operations running without a break in sequence, the item is not cancelled off the list until the last of these operations has been

completed, the foreman showing in the " Remarks" column how far the work has progressed. If, however, there is a break in the sequence of operations (e.g. 1st operation, turn ; 2nd operation, drill ; 3rd operation, finish turn) the item is cancelled when the first operation is completed and transferred to the drilling list, re-appearing as a new item upon the turning list when the drilling operation is completed. It will be observed that every day each list is subjected to revision, by the cancellation of completed items and by the addition of new matter, and each morning the foreman peruses the revised list, notes what has been added, and plans out the work for the day. If the progress of a certain part needs accelerating, a small mark or cross appears by the side of the item concerned, and this is accorded special attention by the foreman, who gives a definite completion date, in the manner already described.

The observations of the foreman appearing in the " Remarks " column are noted by the progress man, and such remarks as " Waiting for tool," " Further instructions needed," etc., are at once investigated, the result of the investigation appearing upon the list at the earliest opportunity ; whilst should it transpire that a certain job has been included upon an incorrect list (in error or due to a change in manufacture) a transfer is effected immediately the error is detected.

## Eliminating Cancelled Items.

It will be found that, as time goes on, whilst the list shows a large number of cancellations, due to the completion of the items in question, there are certain outstanding items which have appeared for quite a long period, this owing to the lengthy nature of the operation—to the fact that the operation must be handled on a machine which has hitherto been engaged upon other work—or because later entries have been given priority. Thus in course of time the list may be increased to two pages, the first containing but one or two outstanding items, whilst the second contains practically the whole of the " live " matter.

The list should be condensed as much as possible, and it is not wise to allow it to extend beyond two pages. To ensure this, all lists should be re-written each week, all cancelled items being eliminated from the new lists, so that the only items remaining relate to uncompleted orders, the one or two old outstanding items appearing at the head of the new list, and beside them the date of the list upon which they first appeared.

All remarks which appeared upon the old list, relating to outstanding items, are copied on to the new, this whether they were indited by the foreman or by the progress man. The old lists are retained for a short period in the works office for reference, and are then destroyed.

## Method Should be Applied Thoroughly.

This method has been described in detail because, although it is to some extent favoured in many factories, it is not always utilized to the fullest degree. It is really a most simple yet effective medium, but unless it is recognized by all concerned as the only medium, its efficacy is open to question. Although the list is in operation, it sometimes happens that the really urgent orders do not appear thereon, these being brought to the notice of the foreman by means of a note or by a personal visit. In the latter case the request to " Just rush this little job through for me " upsets the planned arrangements of the foreman, and once this procedure gets hold it is taken the fullest advantage of, the result being that rush jobs are the order of the day, and reference is made to the list only for " stand by " jobs.

To look at the matter from another standpoint, the list soon becomes obsolete unless it receives constant attention, and should the progress man fail to act promptly upon the observations made by the foreman, or omit to keep the list absolutely up to date, it soon falls into disrepute, and the foreman takes in hand what appears to be the most suitable job, which does not always result in the most important work having preference. If the method is to be applied, it should be applied thoroughly, and upon the list (*see* Fig. 64) should appear every requirement.

## The Foreman and the Works Office.

The foreman should be encouraged to look upon the works office as a real instructional department,

**PRECEDENCE LIST**

DEPT._____ *Date*_____

| Order No. | Drawing No. | Name of Part | Type | Quantity | Remarks | Date Promised | Date Completed |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

FIG. 64

expressing the wishes of the management, and whilst obeying every order issued, he should also take advantage of every facility offered by way of obtaining information. Should he desire to know the cost of a job, the amount of scrap recorded against his department, the authority for a change in manufacture, or any other matter affecting his department, an application to the works office should result in the desired information being forthcoming. No foreman can do himself justice when he is liable to receive instructions from a variety of sources, for conflicting claims are bound to ensue. It is far better for the works manager, the sales manager, the buyer, the cost clerk, and every other official responsible for the issue of instructions to forward these in the first instance to the works office, instead of dealing with individuals; whilst, if information is desired by any one of these officials, the same procedure should be observed.

## CHAPTER XXIII

## AVOIDANCE OF FACTORY TROUBLES

It may be well, at this juncture, to consider for a few minutes the more common factory troubles, with a view to minimizing or, wherever possible, avoiding them. It may be taken for granted that, no matter how well organized the factory may be, little "snags" will occur from time to time, and these, if not taken in hand promptly, may become chronic, and ultimately undermine efficiency.

### Necessity of Securing Goodwill.

The success of the enterprise depends so much upon the spirit displayed that no effort should be spared to secure the goodwill of the operators, and to stimulate interest in their avocations. This may be considered a somewhat difficult proposition in these days of industrial unrest, but this unrest is largely brought about by the monotonous nature of the duties of the individual, which shows at once that a bid for the goodwill of the worker has not been made by the management. That some concerns are exempt from labour troubles, and are consequently growing increasingly prosperous, is proof of the practicability of the effort, and what has been done in one factory can be done in another.

The average operator is a well-meaning fellow, and although naturally desirous of securing a comfortable income, he is not averse from *earning* it if given the opportunity. It is too often the case, however, that this opportunity is denied him, for, in the efforts of the management to secure economical production the aims and aspirations of the individual worker find no place, and the latter, finding himself disregarded, comes to the conclusion that he is being imposed upon, and immediately develops a "grievance."

This is fatal to efficiency, and when once the grievance has taken root it is extremely difficult to stop its growth. The first thought of the manufacturer should be to ensure content amongst his workers, and if his course of action is based upon this, he is laying the foundation to an effective organization.

### Avoiding Friction with Foremen.

There is no need to pander to the worker, for this is as bad as going to the other extreme; but before any move is made, it should be made certain that it will not create friction. And in connection with this the susceptibilities of the foreman and department heads must receive due consideration, for friction or discontent here is immediately reflected in the manufacturing departments, with very undesirable results.

The discontented foreman evinces no interest in his work, and has the appearance of "not caring what happens." He performs his duties more or less automatically, displaying no initiative, and, according to his temperament, ignores or bullies those under his control. Either attitude is resented by the workers, some of whom (and these usually the best operators) quickly take their departure; whilst the others develop into first-grade grousers and slackers, doing no more than they are absolutely compelled to.

On the other hand, the management may be brimming over with enthusiasm, putting into operation methods and schemes, and taking short cuts to efficiency which, by the way, rarely lead to the goal intended. The worker is expected to do this and that without knowing the reason why, and the whole aim of the management seems to be in the direction of rate-cutting. In many factories the direct labour costs show considerable reduction, but the rise of indirect costs is infinitely greater, which shows at once that the wisdom of the management is open to question.

### Aim of the Management.

It must not be inferred that individual factory management can in all cases secure immunity from industrial unrest, for outside influences are at work which can never be eradicated. The aim of the management should be, however, to tacitly admit the operator as a partner in the enterprise—to seek his co-operation and to stimulate his interest—and to ensure that no action on the part of the management will engender bad feeling or create suspicion or distrust. If this policy is adopted at the offset, the organization will be framed on the right lines, the factory officials will work together in harmony, the factory will attract the worker of the right type, and the manufacturer will have cause to congratulate himself upon his business acumen.

*By permission* *Messrs. Nissen, Ltd.*

[Interior of the Steel-lined Portion of a Building Used for Packing Fruit and Vegetable Preserves

## Appointment of Officials.

Before officials are appointed care should be taken to ensure that, not only are definite responsibilities assigned to each individual, but that the execution of those responsibilities is a practical proposition. Without allowing any official to develop into an autocrat, he should have freedom of action in regard to the routine of his department, and enjoy the whole-hearted support of the management. He is appointed to take control of a definite branch of the organization, and it is assumed that he is the best man for the job. He is given every opportunity for displaying initiative with a view to justifying his appointment, and his authority is not undermined by any act on the part of the management.

If he fails to give satisfaction, the management must be convinced that there are no contributory causes outside the control of the individual, before taking action; but once this has been established, action on the part of the management must be prompt and decisive. The retention of such an official in the position he fails to do justice to must inevitably lead to disaster, for the whole organization soon becomes demoralized.

## Importance of Foreman.

The foreman of a department must never be allowed to degenerate into a mere figure head, and if he is not strong enough to exercise complete control he should not be allowed to retain his position. In these days of specialization there are many officials, other than the foreman, who are interested in the manufacturing departments, but they must not be allowed to issue instructions or demand information save through the foreman of the department concerned.

## Departmental Troubles.

We may for a moment consider departmental troubles in connection with (1) the failure to achieve the output desired by the management, and (2) dissatisfaction amongst the workers. The former state of affairs may be attributable to the latter, since it is obvious that, if the workers are dissatisfied, they will not work to the utmost of their capacity, but for the moment we will assume that there is no evidence of dissatisfaction amongst the workers, yet output is much below expectations.

The reason for this is somewhat obscure, for, as far as can be seen, the department should be able to do what is required. The foreman is taken to task, and he makes certain statements, some of which are not favourably received by the management. These statements may include some of the following, viz.—

1. *The uneven flow of work*, due to the failure of other departments to discharge their commitments. This means that at certain periods the department is congested, and some of the orders must necessarily be delayed on account of other work having preference, whilst at other times the foreman is hard pressed to find enough work to go round. Efficient factory planning will tend to obviate this.

2. *The bad condition of certain machines*, which prevents them being worked to their full capacity. A thorough overhaul is necessary here, but as this means the putting of the machine out of action whilst repairs are being effected, together with additional millwrighting costs, the management is reluctant to embark upon the enterprise, and is not disposed to treat the statement seriously.

3. *Diversity of manufacture*, which results in conflicting claims, so that, although the aggregate output from the department is good, little satisfaction is achieved because the output is not effective from the factory standpoint. This could be obviated by restricting the variety of manufacture, or by planning for one variety to be handled at one time, with another variety to follow when occasion arises.

4. *Inefficient operators*. This may reflect upon the capabilities of the foreman, but he should, at all events, be free to choose the type of labour required. It may be that the management may insist upon wages being kept below a certain figure, and if this figure is very low the choice of the foreman (even if he has a certain amount of freedom in this respect) must necessarily be restricted. If the foreman ascribes his failure to inefficient labour, he should be allowed greater latitude in order to prove his assertion, and then, should he fail to do this, the course to be taken by the management is obvious.

## Frankness Necessary.

But, whatever the cause of the trouble, it should be discussed frankly and openly, for nothing is gained by the prosecution of "hole and corner" methods. Some foremen will not speak out because they are afraid of implicating others, or from fear of offending the management. The foreman should be able to see in advance if his department will not do what is required, and he should also know the reason. The obvious course for him to pursue, then, is to lay the facts before his chief, together with recommendations, at the earliest possible moment, and not wait until he is taken to task, for then his reasons are dubbed excuses and do not carry much weight.

## Discovering Causes of Dissatisfaction.

Immediately dissatisfaction is apparent amongst the workers of a department the foreman should take steps to discover the cause, and if he is unable to handle the matter personally it should be forthwith referred to the management. He may be out of sympathy with the cause, and treat the whole matter with contempt, but this only fans the spark, and is detrimental to his own interests.

Whether in sympathy or not, the foreman should insist upon every grievance being ventilated, for only by doing this will he ensure efficiency.

The discontent may, however, arise from the attitude of the foreman toward his operators, and when this is the case it is unlikely that the foreman will take steps to bring the matter before the management. If the works manager is doing his duty it will not be long before he is aware that something is wrong, and it is for him to take action. He will, of course, take up the matter with the foreman in the first instance, but from this conversation he will be able to determine to a very great extent the culpability of the foreman, and a heart-to-heart talk with the principals on either side will in many cases have the desired effect.

### Complaints as to Allowances, Etc.

The more common complaints refer to bonus time allowances, overtime, and the like, and these should be investigated upon their merits. If an operator states that he cannot make a job pay it is up to the foreman to convince him otherwise, and if the matter is tactfully handled the operator is amenable to reason. It is when the foreman flatly refuses to discuss the matter, stating that the allowance has been fixed and cannot be altered, that trouble ensues, whereas, if conciliatory tactics are employed, trouble is avoided even though the allowance remains unchanged.

If, after an investigation, the foreman is satisfied that the operator has real cause for complaint, the matter is referred to the works manager, and here again an uncompromising attitude must be avoided. If the foreman enjoys the trust of the management, it will be appreciated that the application has been submitted upon very good grounds, and must not be lightly disposed of.

### Tact Necessary.

Much can be accomplished by tact, but very little by bluntness. A refusal loses much of its sting when it is accompanied by a reason, and if trouble is to be avoided in the factory, a sympathetic understanding must exist between the manager and the foreman, and the foreman and the operator. It is because appreciation of the other's standpoint does not loom largely that troubles exist in so many factories, and a little reflection on the part of the management will do much to promote efficiency by eliminating discontent.

## CHAPTER XXIV

## CASE-MAKING, PACKING, AND DESPATCH

Packing and despatch are both governed by the nature of the manufactured product, and it is of no use formulating a system unless this factor is known. So far as packing is concerned, this may in some factories be almost negligible, as the product, in the majority of instances, needs no protection during transit. The product of other factories can be accommodated in packages or cases of a standardized design, whilst that of a third group of factories necessitates a specially designed case in almost every instance.

Packing of castings, for example, is resorted to only in connection with the smaller varieties, when they are usually accommodated in barrels, which are preferable to ordinary boxes, being easier to handle and less liable to break open during transit. The larger castings are despatched free of any package (save only for shipment abroad), as experience shows that fewer breakages occur by this method. The packing problem of the foundry is, therefore, a fairly simple proposition, a supply of barrels for the smaller varieties being maintained by a firm specializing in this direction.

### Manufacture of Cases.

Where the product can be accommodated in a case of a standardized design, the question which confronts the management is the one which bears upon the manufacture of the case, and here again the nature of the product is the governing factor. Assuming that the case can accommodate a given number of articles to be despatched, and that this number represents the whole consignment (or a definite part thereof), it would probably be the better policy (unless the firm is in a big way of business and can maintain its own case-making department) to fix up a contract with a firm of wood workers for the supply of such cases.

### Case-making Department.

The case-making department associated with a small engineering factory is rarely a paying proposition, where the case is of simple construction and can be produced upon repetition lines, and two reasons at least may be advanced in support of this contention. In the first place, although the output from the factory is fairly large, it is rarely large enough to allow the case-making department to compete favourably with the recognized wood workers, who, catering for the requirements of many, must certainly secure a much greater turnover. This means that timber can be purchased in greater quantity, and consequently cheaper, whilst the greater output means lower overhead expenses. The recognized wood worker, on account of his heavy requirements, is enabled to fix up contracts direct with the importers, on very favourable terms, whilst the engineer, to get supplies for his own case-making department, must purchase from a firm of timber merchants at enhanced prices.

## Special Cases.

It may be, however, that the product necessitates a specialized case, although this, when once designed, can be produced upon repetition lines. Each unit, which is of fairly large dimensions, must be accommodated in a separate case, which case must be complete with loose fittings, such as cross pieces and the like, to keep the product in position, and here again the question to be considered is whether the case shall be made in the factory or purchased from a firm of wood workers.

Whilst in the first instance, in all probability, the case is non-returnable, so that the weekly requirement is known, in the second (on account of the cost) the case can be returned, if the customer so desires. This means that, up to a point, the returned case can be used time and again, so that, although the number of units despatched each week is substantially the same, that does not represent the number of new cases required each week.

But even here the engineer will secure advantages by purchasing his cases from outside sources, for, assuming his output to be from 40 to 50 units per week, he can contract with a firm of wood workers for the supply of, say, 200 cases, these to be delivered as required. The cases held in stock are recorded upon a maximum-minimum basis, so that, directly the minimum is reached, the supplier is asked to send the number which will bring the stock up to the maximum.

The minimum figure is high enough to allow the supplier sufficient time to make delivery before the stock is exhausted, as it is based upon the time required by the supplier to complete that number of cases. When the order for 200 is received, the supplier cuts his timber to the required lengths, makes the sides, lids, and fittings, and, in short, does everything save the actual putting together of the cases. When the demand is received for, say, 10 cases, therefore, the time involved in the completion of these is not very protracted, and in all probability delivery can be made in three or four days.

Whilst the manufacturer may wish to be self-supporting, he will do well to seriously consider the disadvantages of including in his organization a trade which has little in common with his real business. He is an engineer and cannot claim to know a lot about wood-working, whilst the whole of his factory officials are engineers also. It stands to reason, therefore, that his case-making department must, if it is to be efficient, be under the supervision of an experienced wood worker, and this expense is warranted only when the volume of work involved is extensive.

This is the second reason advanced against the introduction of a case-making department in the small factory, which is a hazardous undertaking. If the supervision of this department is in the hands of one who is an engineer (and not a wood worker) it is bound to be an expense, whilst even if an experienced wood worker is engaged, he is virtually free from the control of the works manager, who is not qualified to criticize his actions or to check his extravagances.

## Where Case-making Department is Necessary.

Where the case must be specially made for the product in every instance, a case-making department must obviously form part of the factory organization, but here the expense can be borne by either the product or the customer. In the case of the former it is assumed that the value of the product (from the standpoint of the manufacturer) is such as will easily cover the relatively small expense associated with packing, whilst the alternative is to charge the customer with the cost of the case, but allowing him the option of returning it, when it can be converted for other uses. The charge made upon the case is usually high enough to accelerate its return by the customer, but as this charge is considerably in excess of the actual cost, the manufacturer is by no means perturbed should the customer decide to forego his option.

## Outside Supplies.

We may assume, then, that the manufacturer is not disposed to introduce case-making into his factory (save only in the instance quoted above, which gives him no choice), and, the design having been determined, quotations for the supply of cases are invited through the medium of the purchasing department. If special features must be incorporated, the advice of a practical case maker should be asked before the design is settled, otherwise a good deal of unnecessary expense may be incurred. It may be advisable to fix a contract for six or twelve months with one firm, or, on the other hand, an order may be placed covering a definite quantity of cases, these to be delivered as required in the manner already described.

The packing shop should adjoin the despatch department, the two being under one control. The stock of cases should be easily accessible, and a record kept of all receipts and issues. When a batch of cases are received, they should be inspected by the foreman packer, who should satisfy himself that they are in accordance with the specification. The thickness of the timber, the number of boards employed in the make-up of the case, the size and thickness of the battens, the total weight of the case, and the make-up of the loose fittings are matters which must engage his attention. Sometimes certain of the fittings are missing, the battens on the cases are too bulky or too frail, whilst three joins may appear upon the side of a case which should contain only two.

*By permission* "*The Iron and Coal Trades Review*"

VIEW IN AN ERECTING BAY

## Returned Cases.

All empties returned should be examined, and the necessary repairs effected before the cases are put into stock. Particulars of returns are entered upon a form similar to Fig. 65, which form is sent to the accounting or the sales department, whichever handles this phase of the business in the first instance.

Returned cases should be classified in accordance with their condition, and utilized to the best advantage, those which are not in the best of condition being reserved for "easy" journeys. The foreman packer is responsible for seeing that every case selected for despatch is capable of standing the journey, without risk to the contents, and he will scrap any case about which there is an element of doubt.

**CASES RETURNED**

No._____

*To* Accountants.

Week Ending_____

| Date | Returned from | No. of Cases | Case Marked | Condition | Put into Stock ? |
|---|---|---|---|---|---|
| | | | | | |

Fig. 65

## Despatch of Goods.

The head of the despatch department must see that all goods are properly packed and properly consigned, and must also see that they are in perfect order before being packed. If the goods are delivered from stock, it may be that he has control of the warehouse, in which case he must arrange for the goods to be inspected just prior to despatch. If, on the other hand, the unit is received from the manufacturing department for despatch, it should be accompanied by an inspector's certificate.

The despatch clerk should receive delivery instructions from the sales office, and when delivery is to be effected from stock, the catalogue number of the unit involved, together with the name and address of the customer, must be given. If the goods are manufactured in accordance with the customer's order, they must be sent to the despatch department accompanied by a delivery note, this giving the customer's name, order number, and other particulars. When the goods and delivery note are received, the despatch clerk turns up his copy of the order, and if delivery instructions have already been received, despatch can be effected without delay. Should it happen, however, that delivery instructions are not to hand, a communication is sent to the sales office, and the goods held until instructions to despatch are issued.

## List of Finished Orders.

A weekly list of finished orders to be despatched (*see* Fig 66) is made use of in some factories, this being compiled by the sales office and sent to the despatch department. By this means the despatch clerk is enabled to see the requirements for the week, and may make enquiries concerning the whereabouts of any specific unit which has not reached his department. The first four columns are filled in by the sales office, the fifth by the sales office or by the despatch clerk (according to the circumstances), whilst the filling in of the last two columns is a matter for the despatch clerk.

At the end of the week, the sheet, duly signed by the despatch clerk, is returned to the sales office,

**LIST OF FINISHED ORDERS TO BE DESPATCHED**

Week Ending_____

| Order No. | Description | Date Due | All Instructions sent to Despatch Department on | Present Location of Goods | Date Goods were Packed awaiting Delivery Instructions | Date of Despatch |
|---|---|---|---|---|---|---|
| | | | | | | |

Fig. 66

and outstanding items are transferred to a new list which operates during the succeeding week. The new list automatically cancels its predecessor, so that the despatch clerk has only one list to deal with each week.

A copy of every despatch note is sent to the sales office immediately the goods have been despatched, and when the list is returned to the sales office at the end of the week the items are checked against the despatch notes.

### Expense Involved.

There are few manufacturers nowadays who are not in agreement with the principle, but in many of the smaller concerns the idea is not practised to any great extent because of the expense involved. It is not to be expected that the elaborate welfare system operating in the large concern can be introduced into the small factory, but this should not prevent the management of the latter factory formulating a scheme which

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AN UP-TO-DATE WORKS CANTEEN (EXTERIOR)

CHAPTER XXV

## SAFETY AND WELFARE

"SAFETY" and "Welfare" have loomed largely of recent years, and in many factories occupy a conspicuous place in the organization. It is recognized that freedom from accident and good health are absolutely necessary to promote industrial efficiency, whilst interest in the worker (from a social standpoint) expended by the management is amply repaid by increased efficiency resulting from the better spirit which prevails.

will at least show that interest in the movement is sincere. It is just as necessary for the small manufacturer to have contented workpeople as for the management of the mammoth concern, and if a sense of proportion is exercised the question of expense need not debar even the small man from introducing a really practical scheme.

### No Need for Elaborate System.

There is no doubt that "welfare" is overdone in many places, and has developed into a

one-sided proposition which panders to the ever-increasing demands of the rabid type of "social reformer," who is never content with the concessions granted, but who is continually asking for more without regard to the ultimate effect. It is here that the expense involved becomes a definite charge, in connection with which there is no proportionate return, and, although this can be borne by the wealthy concern, it makes the smaller manufacturer afraid to attempt the experiment, because he cannot see to what he may ultimately be committed. Still, as before suggested, there is no need for him to adopt an elaborate system—so long as he considers the needs of his own workpeople, in conjunction with his own business, he will be doing all that is required of him.

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AN UP-TO-DATE WORKS CANTEEN (INTERIOR)

## Risk of Accident.

So far as "safety" is concerned, this is a measure of self-protection from the employer's standpoint, and bearing in mind the liability he assumes in case of accident, apart from the loss involved by the incapacity of a valuable worker, it is obvious that he should take steps to minimize the risk of accident. The framing of rules and instructions is alone not sufficient, for in many cases where accidents have resulted it has been proved that, although the rules and instructions were known to the worker, they were not observed.

It is not that the worker, in every case, deliberately ignores such instructions, but that they are not exhibited in such a way as to compel observance. It is truly said that "familiarity breeds contempt," and the more assured the worker becomes the less his caution is in evidence. Guards are provided to shield the worker from the moving parts of a machine, but these are quite likely to be removed unless a bold notice appears thereon, reading: "*This guard must in no circumstances be removed whilst the machine is in motion.*"

Where a travelling crane is used, a notice board may be erected at certain stages bearing the words: "*Danger—Overhead Loads,*" or something similar; whilst a caution against the starting up of the

driving motor by anyone save the appointed person should be prominently displayed.

"*Keep the gangway clear,*" and "*Do not leave loose ends lying about,*" are notices which should be displayed, and their provisions rigidly enforced; whilst every department foreman should be expected to point out the dangers which exist.

Most accidents result from carelessness or forgetfulness, for no man deliberately runs his head into danger, and many accidents can be avoided by the exhibition of notices which will catch the eye, and cause the worker to "pull up with a jerk."

## First Aid.

No matter how small the factory may be, there should be first-aid appliances, in charge of an experienced "first-aid" person. In the larger factory will be found a well-equipped surgery, with a qualified medical man and a nurse; but this provision is, of course, impracticable in the smaller concern. An "ambulance box" should, however, be in evidence, and the workers encouraged to apply for treatment, even when the mishap is apparently quite trivial.

The man in charge of this box need not be engaged specifically for this purpose, for it is by no means a full-time job. There will be found in practically every factory at least one man who has some experience of "first aid," and he should be encouraged to qualify for a certificate. So that he will not suffer financially on account of his ministrations to the injured, a small weekly allowance (over and above his ordinary earnings) should be granted by the firm. In the small factory employing up to, say, 100 workers, an allowance of two hours' pay per week will probably be considered satisfactory.

If possible, the services of a deputy should be available when the "first aid" man is engaged elsewhere, or is absent from the factory; whilst, if women are employed in the factory, one of their own sex should be encouraged to take an interest in "first aid." Every case treated should be entered in a book, which is at the disposal of the management.

## Real "Welfare."

"Welfare" in the small factory resolves itself into the betterment of conditions, and the encouragement of social activities. In regard to the former, the provision of healthy offices and shops, well ventilated and adequately warmed, should be the first consideration, whilst attention to the comfort of the worker finds expression in the provision of seats, adequate washing and lavatory accommodation, and the like. There is nothing here to which the business man can take exception, for the expense involved is more than covered by the increased efficiency of the worker. Rest pauses have been introduced into many factories, but these are not always favoured by the worker, and the matter is one for the consideration of the management and workers of the specific factory.

## Sick Clubs, Etc.

The works "Sick and Sharing-out Club" is a popular feature in some factories, the workers paying a small weekly amount, the total amount subscribed each week being covered by a similar amount given by the management. Social activities are represented by the formation of a social club, managed by a committee elected by the workers, practical interest being evinced by the management; and this club may be comprised of sections catering for those interested in football, cricket, tennis, hockey, and other outdoor sports and whist, musical, and other indoor diversions. The works "beanfeast" and the annual dinner both have their attractions, and help to promote that good feeling which is so essential to business enterprise.

SECTION 11

# The Law Relating to Factories and Workshops

By R. W. Holland, O.B.E., M.A., M.Sc., LL.D.

CHAPTER I

## THE LEGAL OBLIGATIONS OF THE EMPLOYER

In Section 7, on the subject of master and servant, the liability of the master to his servant in relation to the latter's welfare has been considered generally. The obligation to contribute towards insurance against sickness and unemployment does not complete the list of the employer's responsibilities. He is bound to see to the safety of his workpeople, and to compensate them for injury arising *out of and in the scope* of their employment, irrespective of whether his place of business is a workshop or a factory, an office or a shop. Where the workers are employed in manufacturing processes special laws come into force. The employer must be conversant with his responsibilities under industrial laws. He must know whom he may employ, how many persons he may employ in a room of given size, what holidays he must allow to certain classes of worker, what his responsibility is in relation to sanitary equipment, ventilation and cleaning, and the hundred other requirements which are matters between him and the inspectors of factories.

### Nature of the Undertaking.

The obligations of the employer depend to a certain extent upon the place where the business is carried on, but most of all upon the nature of the undertaking. If he is the proprietor of a factory or a workshop the following particulars will be of interest. Indeed, it requires very little to turn a back room behind a shop into a workshop. The mere packing of sweets into packets in an inner room has been sufficient to convert the room into a workshop and to bring workers within the law governing employment in workshops. To-day many hundreds are within this law without being aware of it.

The improved conditions of industrial employment in modern times are due to the intervention of the State. In the early days of the factory the lot of the worker was so hard, the influence of his employment on his health was so deleterious, the hours of labour so long, that industrial life became almost industrial murder. Various Acts of Parliament have been passed, and the present law is laid down in the Factories and Workshops Acts, 1901 to 1920, and in the Acts which deal with the employment of women and children. In order to appreciate the scope of the law on this subject it is necessary to obtain some idea of what is included in the expressions "factory and workshop."

### What is a Factory?

A factory is difficult to define; in fact, a short definition is almost impossible. The common element is the carrying on of some industrial operation by the aid of mechanical power. If steam, gas, or electrically-driven machinery is installed the result is a factory. There are, however, other places which are considered to be factories for certain purposes, as, for example, docks, buildings in course of construction, and some railway sidings. Neither a factory nor a workshop need necessarily be enclosed in a building. The Act will apply to a manufactory carried on in the open air. Under the head of factories we meet with expressions such as "domestic factory" which means a dwelling house in which a business is carried on, machinery being installed and power-driven, and members of the occupier's family being the only workers. A "tenement factory" exists where in one and the same building several businesses are carried on, power being supplied from a common source by the owner of the premises. The Factory Act itself divides factories into two classes, namely, textile, in which operations leading up to the manufacture of textile goods, such as cotton, linen, and silk goods, are performed, and non-textile, as engineering works, paper mills, glass works, and the like. It should be observed that bleach works, calico printing works, and flax scutching are not included under textile working.

### What is a Workshop?

*A workshop is any place, not being a factory, where the* making, altering, repairing, finishing, ornamenting, or *adapting for sale of any article is exercised by way of trade or for gain.* The condition that the labour employed shall be manual labour and not mechanical power excludes factories

from the definition. Under the head of workshops are included hat works, rope works, bakehouses, quarries, pit banks, dry-cleaning works, carpet-beating works, and laundries, where no mechanical power is used. A laundry in which steam power is used for the driving of machinery is a factory, but where hand labour only is employed the place is a workshop. The undertaking is none the less a workshop if it is part of another business or of an institution. A place utilized for the teaching of a trade or handicraft is none the less a workshop where any gain is intended.

A domestic workshop is one which is part and parcel of a dwelling house. Where goods are handed to a person occupying the dwelling house with the understanding that they shall be worked upon for the benefit of an employer, the dwelling house may or may not become a workshop. The true test is, has the employer the right of entry and control over the work? If the reply is in the affirmative the dwelling house becomes a workshop.

The Factories and Workshops Acts distinguish between men's workshops and women's workshops. In the former only men are employed, and in the latter no males or children.

## CHAPTER II

## HEALTH AND SANITARY CONDITIONS: FORMS REQUIRED

THE law makes provision for improved hygienic conditions by laying down provisions under which inspectors of factories are allowed to recognize factories and workshops as complying with the requirements. The Acts themselves are administered by the Home Office, and the Home Secretary is the person responsible for the making of regulations, whilst the factory inspectors and the district councils are the authorities upon whom the duties of carrying out enquiries and enforcing the regulations fall. Under the present law, in a non-textile factory, 250 cubic feet of space are required for every worker. This during hours of overtime is raised to 400 cubic feet, and the Home Secretary is entitled to vary the requirements by raising the space required where artificial light

*Photo* *Kealeys, Ltd.*

ENTRANCE TO A FACTORY
Showing arrangements for clocking-on

is in constant use, as for example, in a bakehouse the space is 400 cubic feet per worker. In all workshops a reasonable temperature is required, and where a workshop forms part of a dwelling house, the fact will be taken into consideration in the case of a charge of overcrowding, this being an offence against the law amounting to nuisance.

## Painting and Limewashing.

Every factory is required to be limewashed once in every fourteen months, and not more than fourteen months must elapse between such successive cleansings. In the alternative the factory may be painted once in every seven years, but in this case the law requires the factory owner to have the paint washed and cleaned with soap and hot water every fourteen months. In the case of a bakehouse six months is substituted for fourteen months. If these requirements are not carried out, whether in factory or workshop, the Inspector of Nuisances or the Medical Officer of Health may certify the fact to the District Council, who will order the cleaning to be carried out forthwith. In case of failure the District Council may do the work, charge the occupier with the cost, and the occupier is liable to a fine of ten shillings per day during default.

Interior of the Canteen at the Factory of Messrs. James Keiller & Son, Ltd.

## Ventilation, Etc.

The question of ventilation is also taken up in the Act. Air coming into the building should be free from effluvia, and where alterations providing for improved ventilation are insisted on, arrangements can be made whereby the expense is shared by the occupier and the owner of the premises if the former is not himself owner. This rule applies even although the humidity of atmosphere is artificially produced, as in the case of cotton factories. The ventilation of a textile factory should be so complete that about 600 cubic feet of fresh air per person per hour should be introduced into the room. Sufficient sanitary conveniences must be provided, and the regulation of this matter is in the hands of the local Council. The Inspector of Factories may require the local authority to act, but if the authority defaults he has power to take proceedings and to recover from the local authority any expense he incurs, the authority in its turn having the right to recover from the occupier.

Where the atmosphere is moistened artificially it is necessary to give notice to the Chief Inspector of Factories, the notice must be in writing, and each three months the local inspector will visit the factory and examine the air, recording its temperature, quantity, and humidity on each occasion. The water that is used for the production of steam for this purpose must be pure, the pipes through which the steam passes must be small and properly insulated, and no steam at a higher pressure than 70 lbs. to the square inch must pass into any room occupied by workers. In a cotton factory the temperature must not fall below 50° Fahrenheit. Further protection is given in textile factories, where the roof is glass, by the requirement that from May to September the glass must be kept whitewashed unless the Inspector of Factories is satisfied that the workers are otherwise properly protected.

## Forms.

It is well for an employer who occupies either factory or workshop to obtain from His Majesty's Stationery Office a list of forms required under the Factory Acts. This can be ordered through a local bookseller or direct from Imperial House, Kingsway, W.C.2. Many notices are required to be sent to the District Inspector of Factories, and these notices should be on the appropriate form; for example, notice of an accident in a factory must be sent on Form 43; the report on the steam boiler, Form 55; list of outworkers, Form 44; notice fixing or altering holidays, Form 34; notice of occupancy or removal, Form 35, etc.

## The General Register.

An occupier of a factory or workshop is required to keep a General Register in which entries are made as to cleaning, young persons employed, and a variety of matters directions as to which will be found in the Register itself. The Register is again a *prescribed form* (Form 37 or 37a, according to whether it is kept for a factory or a workshop).

## Abstract.

In all factories and workshops a large notice is required to be kept constantly affixed on the premises where it can easily be read. The appropriate notice must be obtained from His Majesty's Stationery Office direct or through a local bookseller. There are special forms for textile factories, non-textile factories, laundry workshops, men's workshops, and workshops. The top part of the notice is a form which is the same in all cases, whilst the lower part consists of an abstract from the various Acts, together with a note on the Truck Acts.

The form has to be filled in by the occupier of the factory or workshop and signed and dated by him, and it is necessary to keep the particulars in the form up to date. The particulars required are the names and addresses of H.M. Inspector of Factories for the district, H.M. Superintending Inspector of Factories, H.M. Chief Inspector of Factories and Workshops, from whose department all information may be obtained, the address being Home Office, London, S.W.1., and the Certifying Surgeon.

CHAPTER III

# HOURS OF EMPLOYMENT

An important part of the Abstract from the Acts is the provision made as to meal times and hours of employment. These are generally regulated by some public clock, in which case the name of the clock must be entered on the form at the top of the Abstract in the space provided.

## Particulars to be Given on Notice or Abstract.

On the Notice or Abstract which is exhibited on the premises, particulars of hours are given in the form below.

The form is the latest published, but the centre section will soon disappear, as part-time employment of children in factories and workshops is prohibited by the requirement of the Education Act, 1922, that all children shall continue to attend school until the end of the school term in which they attain the age of fourteen years. At this age they attain the status of young persons which they retain until their eighteenth birthday.

No woman or young person may be employed in a factory or workshop except during the periods of employment and with the intervals for meals shown in the notice below; and these must be fixed within the limits prescribed. They are not to be changed unless notice on Form 31 has been served on H.M. Inspector for the district, and affixed in the factory or workshop, nor more often than once in three months, except with the written consent of H.M. Inspector.

In a tenement factory, however, the occupier of a tenement may affix in his tenement a separate notice (Form 47), in substitution for the general notice fixed by the owner relating to the tenement factory as a whole.

| | Period of Employment. For Women and Young Persons, and for Children employed on alternate days. | | For Children Employed in Sets. | | | Time for Meals. For Women, Young Persons, and Children. | | |
|---|---|---|---|---|---|---|---|---|
| | From | To | | From | To | | From | To |
| Monday to Friday | A.M. | P.M. | Morning Set | A.M. | | Morning | A.M. | A.M. |
| | | | | | | Mid-day | | |
| | | | Afternoon Set | P.M. | P.M. | Afternoon | P.M. | P.M. |
| Saturday | A.M. | | Saturday | A.M. | | Saturday | | |

No overtime may be worked save under special exception allowed in certain places and processes.

The period of employment for women and young persons must be fixed as follows—

For any day except Saturday, from 6 a.m. to 6 p.m., or from 7 a.m. to 7 p.m., or from 8 a.m. to 8 p.m.; with at least 1½ hours for meals, 1 hour being before 3 p.m.

For Saturday, from 6 a.m. to 2 p.m., or from 7 a.m. to 3 p.m., or from 8 a.m. to 4 p.m.; with at least ½ hour for a meal.

## Shifts.

The Home Secretary may, on the joint application of the employer or employers of a factory or workshop or group of factories and the majority of the workpeople concerned, make orders authorizing the employment of women and young persons of 16 years of age and upwards at any time between the hours of 6 a.m. and 10 p.m. on any week-day except Saturday, and between the hours of 6 a.m. and 2 p.m. on Saturdays, in shifts averaging for each shift not more than 8 hours on any day. Orders so made shall be subject to such conditions as may be necessary for the purpose of safeguarding the welfare and interests of the persons employed. The Home Secretary may revoke an Order in the event of non-compliance with any of its conditions. Unless revoked, such an Order will remain in force until 31st December, 1925. (Employment of Women, Young Persons and Children Act, 1920.)

*By permission* *Messrs. Kearsley & Co., Ltd.*

SECTION OF PAINT MANUFACTORY

## General Regulations.

Women and young persons must have the same meal times; and may not during meal times be employed in any manner in the factory, or be allowed to remain in any room in which any manufacturing process or handicraft is being then carried on.

*Photo* *Kealeys, Ltd.*

A BUSY GENERAL OFFICE

(Messrs. Burgoyne, Burbidges & Co. Ltd.)

*Frontispiece*

No woman or young person may be employed continuously for more than five hours without an interval of at least half-an-hour. Employment is deemed to be continuous unless interrupted by an interval of at least half-an-hour.

No woman or young person employed in the factory or workshop both before and after the dinner hour may be employed on the same day in the business of the factory outside the factory except during the period of employment shown in the Notice exhibited on the premises.

If a woman or young person is employed by the occupier on the same day both in the factory or workshop and in a shop (*a*) the whole time of such employment must not exceed the number of hours permitted by the Acts for employment in the factory; and (*b*) if employed in the shop before or after the period of employment specified in the Notice, the prescribed entry must be made in the General Register. No woman or young person may be employed on Sunday, nor within four weeks after she has given birth to a child. No young person may be employed until the prescribed particulars have been entered in the General Register. No young person under 16 may be employed in a factory or in a workshop where certain processes are carried on, e.g. baking, fruit preserving, etc., without a certificate of fitness from the certifying surgeon. Any conditions attached to the certificate must be observed by the occupier. Before granting the certificate, the certifying surgeon may examine any process in which it is proposed to employ the young person.

## Holidays.

Woman and young persons must be allowed the following holidays—

England and Wales. Christmas Day, Good Friday, and the four Bank Holidays, and a Notice to the Inspector is not required. For each of these holidays another holiday, or two half-holidays, may be substituted by the occupier by Notice given on Form 34.

Scotland. In Burghs. The two sacramental fast days, or, if these are discontinued, two days less than three months apart, to be fixed by the Town Council; and in addition, four holidays or eight half-holidays, fixed by the occupier by Notice on Form 34.

Elsewhere. Two holidays, not less than three months apart, fixed by the occupier by Notice; and, in addition, four holidays, or eight half-holidays, fixed by the occupier by Notice.

Ireland. (*a*) Christmas Day; (*b*) any two of the following days fixed by the occupier by Notice—namely, 17th March (except when a Sunday), Good Friday, Easter Monday and Easter Tuesday; (*c*) three other holidays, or six half-holidays, fixed by the occupier by Notice.

Each half-holiday must comprise at least half of the period of employment for women and young persons on some day other than Saturday. All Notices fixing holidays, or substituting one day for another, must be affixed in the factory or workshop and sent on Form 34 to H.M. Inspector for the District in the first week in January. The dates can afterwards be altered on a fortnight's notice given in the same way. At least half of the holidays fixed by the occupier must be between 15th March and 1st October, and all women and young persons must have the same days for holidays.

# CHAPTER IV

# OTHER LEGAL REQUIREMENTS

We have seen that the number of persons that can be employed in a factory or workshop depends upon the conditions and size of the rooms.

## Number of Persons Employed.

If the dimensions, that is, length × breadth × height, are known, the result is divided by 250, 400, 500 or other appropriate figure (p. 245).

Number of Persons who may be Employed in Each Room.

[*If the number of Rooms be greater than can be entered here, a separate Form* (*Form* 46) *must be filled in and kept affixed with this Abstract.*]

| Name of each Room, or distinctive Number or Letter. | Dimensions of each Room *in cubic feet.* | Number of Persons who may be Employed. |
|---|---|---|
| 1 | 15,000 | 60 |
| 2 | 8,000 | 32 |
| 3 | 2,500 | 10 |

The foregoing form, which is part of the exhibited Abstract, is completed on the supposition that conditions are normal, that is, artificial light is not constantly in use. The dimensions in cubic feet are here divided by 250. For overtime Room 2 would accommodate only twenty persons.

## Dangerous Trades.

Where a dangerous trade is carried on the proprietor of the workshop or factory is required to observe any special rules laid down by the Home Secretary. A copy of such rules is required to be exhibited in a prominent position in the factory. In cases where the extraction of lead or other poisonous substances is carried out, or

where lead, arsenic or the like are used, meals must not be taken in rooms where dust or fumes arise, and a suitable dining room must be provided. In trades of this kind proper draught provision for drawing away fumes must be provided; periodic medical examination and health record must be undertaken. Food, tobacco and drink must be kept outside the workrooms, and suitable cloakrooms, washing accommodation and protective clothing must be supplied. In certain trades women and young persons must not be employed; this rule applies more particularly to working in lead.

Women and young persons are not during meal times allowed to remain in the workrooms where mixing of materials, grinding, cutting or polishing in glass works is proceeding, nor may meals be taken in rooms where sorting and dusting of wool, hair, or rags is carried out. The dust arising from the working and polishing of bone, ivory or shell, and from the making of playing cards, fancy boxes, artificial flowers and colours is deemed to be deleterious, and meals should not be taken in rooms where these processes are carried out.

## Machinery.

For the safety of employees all moving machinery is required to be fenced, particularly fly-wheels, water-wheels or engines worked by mechanical power. Mill gearing must also be fenced or so placed as to be safe to every person working near. Young persons are not allowed to clean any dangerous parts of machinery in motion, and women and young persons may not clean any part of mill gearing, when in motion. The term "mill gearing" means shafts, wheels, drums, and pulleys by means of which the motive power is communicated to the machine which carries on a process of manufacture. For further protection steam boilers must be maintained in good condition, supplied with all safety appliances, and be thoroughly examined by a competent person every fourteen months. The boiler inspector's report on Form 55 must be attached to the general register within fourteen days.

## Truck Acts.

Payment of wages to all workers must be in cash and not in kind. There are certain exceptions including medicine, fuel, tools, rent, food cooked on the premises, but these exceptions are only allowed where there is a contract with the employee evidenced by his signature. Any agreement that wages shall be spent in any particular manner is equally unlawful, and fines and deductions for bad work or injury to the employer's property are illegal unless under a contract between master and servant. Notice of the contract must be affixed in the works and a copy given to each worker.

Of a similar nature is the provision with regard to piece-work that, in certain industries named in the abstract exposed in the workshop, the piece-work price together with written particulars for the calculation of wages shall be supplied to each worker. Provision is made, however, for the imposition of a penalty should a worker divulge trade secrets which may arise out of the information supplied to him.

SECTION 12

# The Transfer of a Business

By Max Rittenberg

## CHAPTER I

## HOW TO BUY A BUSINESS

The natural way to proceed, when one wishes to buy a business, is to go to a business transfer agent. There are many agencies of this character in all cities, and in towns of any size. The agent will have a list of businesses and partnerships which are open to purchase, in all sorts of lines of trade.

*But*, it is well to realize thoroughly that the transfer agent is *not* an unbiased party. His business is to sell—to sell you a business. His profit will come from a percentage (usually 5 per cent) of the money you pay for the business. If he does not effect a sale to you, he does not make money, and he is also out-of-pocket over his time.

This being so, he is biased, and one cannot rely on his advice. The situation is somewhat similar to that of going to a stock-broker and asking his advice on the buying of stocks and shares. He will tell you, in most cases conscientiously, which shares he thinks are "a good buy" at the time; but he will not advise you to buy nothing at all, even if general conditions are very uncertain. He will always urge you to buy *something*.

On the other hand, if you asked the same advice from your banker during a time of bad trade, he might advise you not to buy any stocks and shares at all, but to leave your money on deposit at the bank, at interest. This might be perfectly sound advice, but the bank manager will naturally be biased in favour of having the deposits at his bank as large as possible.

Therefore, in taking advice about stocks and shares, the prudent man will consult a stock-broker and a banker; listen to what both of them have to say; and then *make his own decision*.

And, in the buying of a business, a prudent man will similarly consult both a business transfer agent and a bank manager, and will listen to what both have to say; but will use his own judgment, and put that personal judgment paramount.

In order to be able to form a clear judgment, and in order to avoid pitfalls, it will be well for him to know all the outstanding points he should have in mind in the buying of a business. These points are given below.

### Congeniality of Occupation.

Make quite sure that the business you decide to investigate, with a view to purchase, is one for which you have some aptitude—or, at any rate, a business which will afford you a congenial occupation.

There are two points of view in this. The first is that no one is likely to make a success nowadays in a business for which he has no special qualification in knowledge or experience, or about which he does not feel enthusiastic. The most successful men are always happy in their work. They like their work. They get a lot of satisfaction out of making vinegar; or from filling indent orders from the West Coast of Africa; or from the handling and sorting of waste rubber—work in which other types of men might find no interest at all.

The writer once met a man who sat up half the night talking enthusiastically, and even lyrically, over the subject of his business, which was dealing with pickled herrings—and this man had made a big success in his chosen line. Other men with no yearning love for pickled herrings would probably make a failure at that particular business.

The other point of view to be realized—and it is one which is apt to be overlooked—is that if you buy a business, and find in a short time that it is not congenial to you, it will be very difficult to sell it again without loss. The very fact that your connection with it has been short, is something which will condemn it in the eyes of possible buyers. They are certain to use that fact as a lever for beating down the price at which you hope to sell the business to them.

### No Haste in Buying.

The endeavour of the transfer agent will naturally be to hurry up your decision. He is sure to tell you that there are others after this particular business; that one man is very near the point of purchasing; and that if you do not decide quickly, this great opportunity will slip out of your grasp. And possibly he will also deliver to you some platitudes on the importance of rushing out to meet opportunity when it knocks at your door.

Discount such statements. It is never easy to sell a business. The sale may hang fire for months, or even for years. And no one business is so important and desirable (unless it be a very large firm of exceptional reputation, which is right away from the kind of thing we are considering), that there will not be others coming along of equal desirability, or even better.

It is always wise to make investigations as to past history, and as to how many proprietors of full credence. "Ill-health" is often no more than an excuse for getting out of a badly-paying and *harassing* business.

## The Accounts of a Business.

Obviously it would be unwise to buy a business in which only insufficient or haphazard accounts have been kept.

This is elementary; but what is not elementary is to make sure that even in a business with

The Cutting-out Room in a Modern Boot Factory (Messrs. Scales & Sons)

there have been during the last few years. If the business has frequently changed hands, that will, of course, be a red-light danger signal. There must be some hidden factor which has caused the successive failures.

You will, of course ascertain the status of the vendor, through one of the trade protection agencies—though their reports are usually of a very generalized character, and are not very positive in one direction or other. However, reading between the lines of them, one may be helped towards a decision.

Consider carefully the vendor's alleged reason for selling—whether it is a sound one and worthy

fully-kept accounts, the balance sheet really gives a proper view of the position of that business. One should look very closely into the assets side, and insist on a detailed and itemised list of the assets.

For instance, under Sundry Debtors (which, of course, appears in the balance sheet as an asset) there may be bad debts of old standing which are quite uncollectable, or there may be counter-claims from the debtors against some of the items. There may also be I.O.U.'s or promissory notes from friends of the vendor, which are of little actual value, included as an "asset" of the business.

The assets put down under Premises, Plant and Machinery, and Fixtures and Fittings, are sure to be over-valued; and the stock-in-trade should never be taken at the vendor's estimate, but according to a valuation to be made by a trade valuer.

If you yourself are not very familiar with accounts and balance sheets—and the ways in which these can be "doctored" to give a false view of the position of the business, without actually infringing the law—then it is prudent to have a qualified accountant to look into this aspect for you. Even capable business men—good organizers and effective salesmen—are often unable to see through unreliable figures in the books, without the aid of someone well accustomed to searching into such figures.

Besides having the books of the firm handed over to you for detailed inspection and investigation, it is also advisable to ask for vouchers of the income tax payments.

There are two reasons for this. First, are the annual profits, as stated to you, in conformity with the figures as given to the income tax authorities? And secondly, there might be a pitfall for you in it. Suppose that the vendor has been under-stating his profits to the income tax authorities for some years past, and suppose that after you buy the business, the income tax officials get to hear of this situation, and set out to claim the extra money which is due to them.

If the vendor has been running a private business firm, then the income tax authorities will have to claim against him, and not against you. *But*, if the vendor has been running a limited liability company of which he was managing director, holding practically all the shares—and if your "purchase of the business" consists in purchasing these shares from him, then the income tax authorities' claim will be against the *company*—which means, in this case, *yourself*.

You would have to pay.

## The Terms of the Lease.

If the premises are held on lease, examine the state of repair and the terms of the lease. It must be remembered that the landlord can at any time serve a notice to repair, which might be expensive for you to comply with.

Also, one should carefully consider if any other terms of the lease are unduly onerous in any respect. For instance, there may be a clause in the lease fixing the rent at so-much for the next couple of years, and raising it considerably for the years following.

Further, remember that the vendor will have to obtain the landlord's licence for the lease of the premises to be "assigned" to you. The landlord will investigate your references—and if he (the landlord) does not deem them sufficient guarantee from his point of view, he may refuse to allow the lease of the premises to be assigned over to you. This is one reason why one should not pay any money down until *all* the documents in the case are in order for signature.

If the premises are held on a short lease, this may be a point against buying the business—because the termination of a lease is usually an occasion for the landlord to demand an increase of rent, or the exactment of some condition in the new lease which may be onerous.

And if one then thinks of removing to other premises, it may be found that the goodwill of the business is dependent to some extent on its remaining in the old premises.

In such a case, you would be at the mercy of the landlord—a very bad position in which to bargain for the terms of a new lease.

## The Book Debts of the Business.

As mentioned above, "book debts" are rarely worth their face value. In the purchase of many businesses, a deduction of 33⅓ per cent off the face value may not be too much.

Also, it is well to know the legal point that if you are going to sue any of these old debtors for money due to the business, you will have to have first a formal assignment of the debts to yourself from the vendor, and you will then have to give written notice to the debtors of this assignment.

Another possible pitfall arises out of the Act of 1916 regarding the registration of business names. If the vendor has been carrying on his business under a "trading name," and has not properly registered that trading name, then you may not be able to recover the book debts of the business, even though you are an "innocent purchaser for value."

## The Liabilities of the Business.

On the face of it, one would not imagine that the figures of liabilities on a balance sheet *could* be actually larger than they are given, unless there were fraud in the case.

Nevertheless, there are "contingent liabilities" which need not appear on a balance sheet, but remain hidden.

For instance, a business may own shares in a bank, or in an insurance company, or in an industrial company, where the shares are not "fully paid-up," but have a contingent "call" for more money attached to them. This may be a serious liability, as in the case of the unfortunate people who held shares in the City Equitable Fire Insurance Co., and after the failure of that company, were required by the Official Receiver to pay up 16s. per share—apart from their losses.

Further, suppose that a bank or some private financier has lent money to the business on the security of a mortgage—on the premises, or on the plant and machinery, or on the stock-in-trade, or as a "floating charge." This frequently

happens. The amount of this mortgage-loan would, of course, appear on the liabilities side of the balance sheet; and one would assume it to be fully covered by items on the assets side—premises, or plant and machinery, or stock-in-trade. One would assume that the lender has not lent his money without making very sure of the value of the security offered to him.

But, if it should happen that any of these securities depreciated considerably, or were damaged by fire, it would not be sufficient to go to the bank or financier and say: "I can't pay back your mortgage money; but you can go and take the security on which you lent the money." The lender would reply in this way: "I will take the damaged goods in part payment of my loan, but the rest of it is legally claimable by myself *on any other assets* you may possess."

This point is not widely known. The danger of mortgage-loans is not fully appreciated. And that is why so many businesses are left under-insured against fire and other calamities. The owner does not realise that beyond the material damage to the business from such calamities, there will come a demand from the bank or other lender to be paid back in full out of any other sort of asset which the business may possess.

## Insurance Policies.

All the insurance policies attached to a business must be properly transferred to yourself; and the vendor must properly notify the insurance offices that this has been done.

## Preventing the Vendor from Competing with You.

The terms of the contract are usually prepared by the transfer agent. Make sure that he has inserted a clause which will prevent the vendor, under sufficient penalty, from engaging himself in a similar business within a certain radius of you, and for a certain number of years.

It must be remembered that many of his customers will have a personal attachment to him, and may be inclined to transfer trade to him in a new business, if that business is opened in the same locality as yourself.

In the special case of a mail-order business, the vendor might open up in any part of the country, and yet carry with him a large part of his old trade.

## Deposits.

It is, of course, prudent to pay no deposit until all the terms of the transfer are arranged, and the contract has actually been signed.

But if the vendor absolutely demands that you put down a deposit—on the ground that it is unfair for you to expect a free option on the business, when he might be able to sell it to other people—then insist on a written proviso that your deposit is to be returned to you, if any fact comes to light, in the course of your investigations, which is at variance with the facts of the business and conditions of the lease which he has already given to you in writing.

## Bringing the Books of a Business Up to date.

Time will naturally lapse between the date when you first investigate the business and are shown its books, and the date on which you come into actual possession.

Meanwhile, certain liabilities of the business, such as rent, rates and taxes, lighting and heating, and other things which are paid quarterly, will have been running on. See that the vendor pays his proper proportion of such payments-to-be-made at quarter day by yourself.

## Patents and Trade Marks.

If the business is handling any patents or trade marks which are owned by the inventor, and are worked under licence, make sure that these can be, and are, properly transferred to yourself.

There are many possible complications—and in a case where the patents are of considerable value, it will be advisable to consult a solicitor.

## Agency Rights.

If the business is working a selling agency, for some manufacturer in England or some manufacturer abroad, the terms of the agency may be *personal* to the vendor. That is, the manufacturer may not be willing to transfer the same selling rights in his articles to yourself.

All this must be threshed out before the signing of the agreement to purchase.

## The Value of Goodwill.

Most prudent business men are very sceptical about the figure by which "goodwill" is valued in a business. It is often a purely *arbitrary* figure, put down by the proprietor at his own sweet will, and added to by him from year to year, according to his own ideas of his popularity with the public.

The only true basis for an assessment of goodwill is on the net profits which have been made by the business during the last five years. The average net profit per annum for these five years can reasonably be regarded as the profit which will be made next year and in successive years.

It is then a question of bargaining for "how many years' purchase" of the average net profit should be paid in respect of goodwill. Some people, buying an old-established and thoroughly sound business, will be ready to pay as much as ten years' purchase. In most cases, five years' purchase is nearer the mark. Often, a buyer can

get what he wants on a basis of three years' purchase.

### Allowance for Working Capital.

It would, of course, be very imprudent to sink all one's capital in the buying of a business. Every business requires a certain amount of working capital to keep it going.

No prudent man will buy a large motor-car unless he has the money to pay for a chauffeur, to pay for garage charges and repairs, and to pay for the petrol and the lubricating oil necessary to keep the car running.

The same thing applies to a business. One will want working capital to keep it running. And if it is necessary for you to borrow money for this working capital, make sure you *can* borrow it before you sign the contract.

### The Help of a Solicitor.

Having agreed to buy, it is advisable to employ a solicitor to see the transaction through for you in proper legal form.

The fee to a solicitor should be regarded in the light of a fee for insurance against pitfalls or trickery.

## CHAPTER II

## HOW TO SELL A BUSINESS

If a trader desires to sell his business, the first thing to do is to read through the foregoing chapter on "How to Buy a Business," in order to realize the point of view of the prospective buyer. One must have clearly in mind the kind of things he will want to investigate, and the basis on which an acceptable deal can be offered.

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A Board Room

For instance, if your books have been loosely kept, it will be advisable to have them brought thoroughly up to date by a qualified accountant, so that they can be presented to the possible purchaser without fear of his finding some serious fault or discrepancy in them, and thereby prejudicing him against purchasing.

If you have an inflated idea of the value of the "goodwill" of your business—as so may people have !—it will be well to realize that the outside man will not take that view. If your business is of a small and not very important nature, subject to competition on all sides, it is highly unlikely that anyone will pay you a ten years' purchase of the average profit, in respect of your goodwill.

In the same way, many of the points dealt with in the preceding chapter have a direct application to the man who wants to dispose of a business—and may help to avoid those tedious negotiations which come to nothing in the long run, and by raising false hopes in the vendor, waste his time and energies.

## Methods of Getting in Touch with Purchasers.

The usual methods of getting in touch with likely purchasers are—

Advertising in newspapers of national circulation, such as *The Times* and *The Daily Telegraph*.

Advertising in the larger provincial newspapers.

Getting into touch with prospects through an accountant or a solicitor.

Placing the business in the hands of a reputable business transfer agent.

The latter may save you time by sorting out the "time-wasters"—people who would like to buy a business, but actually have not the amount of capital necessary to do so. There are also quite a number of people who have the vague ambition of owning a business; who will investigate a lot of them out of a mere desire to satisfy that itch, mentally, without ever actually committing themselves to the adventure and risk of financing and running a business.

The transfer agent will also work *for* you, because his job is to sell businesses—his profit will come from selling yours, in the form of a 5 per cent commission.

Do not pay a booking fee to a transfer agent, unless he is actually going to spend money on your behalf in advertising your business in newspapers.

Also stipulate that the commission to be paid by you shall only be due when the final contracts have been signed with the purchaser, and he has actually paid the purchase money over to you.

## Over-Statement of Takings and Profits.

One is entitled to be optimistic about the future of one's business—but not about its past!

Its past is on record—in the books, if they have been properly kept. If the business is sold on any written misstatement of takings or profits in the past (or on any such misstatement made verbally in the presence of witnesses), then it would be ground for a lawsuit.

This applies legally for six years after purchase. An action can be started by the purchaser any time within the six years, but not later than that.

## The Lease of the Premises.

If your lease is a short one, this will be an obstacle to the easy selling of your business, for the reason explained in the preceding chapter on the buying of a business.

So, before you attempt the sale, it is advisable to get your landlord to give you a written option for a term of years at the rent you are now paying, or at perhaps a small increase. In order that this option shall be binding, it must be given by the landlord for some material consideration—say, the payment of one shilling—and it must also be properly stamped.

## The Book Debts of the Business.

Sell the book debts with the business. It would be troublesome and expensive to have to collect them after you have ceased to be the proprietor.

## Stock-in-Trade.

It is fairest to both sides to have the stock-in-trade valued by a trade valuer, otherwise one party to the transfer may feel that the estimation is an unfair one—and in the case of the selling of a business, an agreement by bargaining is more likely to be unfair to *yourself* than to the purchaser.

## Pending Contracts.

The purchaser must undertake in his agreement with you to take over the remainder of any contracts you have entered into, and any contingent liabilities attached to them.

For instance, if you had contracted to supply a manufacturer with construction work, or installation of machinery, the manufacturer might have a clause binding you under penalty to erect in a certain time, and to erect to the exact specifications agreed upon.

Such a "contingent penalty" must clearly be taken over by the purchaser.

Heavy purchasing commitments ahead are not usually relished by a prospective purchaser, because he may have ideas very different from your own, as to the policy and conduct of the business. Therefore, if you are thinking of getting out of your business, it would be wise to restrict your purchasing commitments as much as possible, and so be able to offer your business as one which is not tied up too far ahead.

## The Landlord's Licence to Assign the Lease.

As explained before, the landlord can withhold his consent.

You cannot therefore enter into a binding contract to sell, until the landlord has investigated the purchaser's references, and has given you in writing his consent to your assigning the lease. And this opens up the question of your contingent liability to the landlord, in case the purchaser were to "fail." If he failed, the landlord can still come down on you for the remainder of the rents of the lease.

This means, make as sure as possible, by investigation, that the purchaser has sufficient money of his own for working capital—besides

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what he pays to you for the purchase of the business—and therefore will not be likely to let you in for this contingent liability.

## The Employment of a Solicitor.

There are legal pitfalls from your side of the fence as well as from the purchaser's side; and it may be a prudent form of insurance to have a solicitor see the transaction through for you in its final stages.

## In General.

It is never easy to sell a business in a hurry, except at a heart-rending sacrifice.

The selling of a business is a form of thoughtful salesmanship, and must be regarded as such. Men who sell their businesses at a comfortable figure, usually do so by planning the sale a year in advance, or perhaps several years in advance.

They say to themselves, well beforehand: "The time will come along when I will want to retire, or buy an estate in the country; and in order to do this, I must begin to shape the figures of the business so that they will look well to the prospective purchaser. He will like to see that money has been placed to reserve in past years; that not all the money earned by the business has been taken out of it; and that the profits have been showing a gratifying increase from year to year. It ought to be possible to shape the figures of my business so that it will look very desirable to that future purchaser. The time to begin to do so is now."

Further, it is poor salesmanship to try to sell a business in a hurry—in an emergency rush. Negotiations with various "nibblers" may take many months. One has to be patient. One has to show that one is not in a hurry to sell. One has to let the other man feel that it really does not matter to you whether you retire this year, next year, or the year after. One has to nail firmly inside his mind the idea that this business is so very desirable, and is such a sound dividend-payer, that you are only parting with it reluctantly—and that, after all, you may perhaps change your mind and decide to continue with it yourself.

This is the frame-of-mind in which men sell their business profitably. And it has to have a pretty solid foundation underneath.

Therefore, if you decide to sell, prepare for your campaign well in advance, and allow ample time for patient negotiations.

## SECTION 13

# Insurance

By J. J. Bisgood, B.A., F.C.I.S., J.P.
*Editor "Insurance Record"*

CHAPTER I

## FIRE INSURANCE

The "little man" having invested his small capital in the business upon which he has decided to embark, is confronted with the problem of how to protect himself in the event of certain casualties happening as his business proceeds. Perhaps the most obvious of these is the destruction of his stock and his house by fire. Naturally he has heard of fire insurance but he knows very little about it. He has heard perhaps that Mr. Smith round the corner is an insurance agent, but he may not know what degree of strength is possessed by the office which Mr. Smith represents.

### Selecting an Office.

There are in this country a number of the most powerful insurance offices in the world. Likewise there are many which may in time become powerful offices, but which at present have their way to make. As our friend cannot be expected to know which are which, and as in his small beginnings absolute safety is essential, he should ask to see the balance sheet of the company which Mr. Smith represents. He should first of all look at the item "Premium Income," then at the item "Reserve for Unexpired Risk," and next at the item "General Reserve."

The reserve for "unexpired risk" should not be less than 40 per cent of the premium income, that being the figure recognized as sufficient to meet everything but catastrophe. The item, "general reserve," represents the surplus kept in hand to meet claims, over and above the sufficient reserve of 40 per cent and forms an additional security.

If Mr. Smith's office is strong as to these two reserves then he may safely entrust his fire insurance to be placed through Mr. Smith's agency.

The insurance will be effected at the rate of premium which fits the nature of the stock in trade. If, for instance, he is an oilman or deals in inflammable material like firewood or paraffin, he must expect to pay more than his neighbour the butcher. A fire in a butcher's shop is seldom heard of, whereas a fire in an oilman's shop is quite common.

### Indemnity.

In every kind of assurance, excepting life assurance and, in some cases, personal accident insurance, the contract with the insurance company is to pay an indemnity in cases of loss. It is very important that the insured person should understand precisely the exact meaning of the word "indemnity." Many people who insure their houses for, say, £1,000, are under the impression that if the house is burnt down they will get £1,000. In point of fact, the maximum they can get is £1,000, but only if it appears that the total damage is £1,000 or more. What happens when the claim is made is that the actual loss is measured by an assessor from the insurance company and an assessor employed by the insured person and the figure agreed by them is paid to cover the loss. For instance, if it can be shown that the house was never worth £1,000 but only £800, then £800 is paid and the insured person has no claim to more. Of course, it very rarely happens that property damaged by fire becomes a total loss. There are fire brigades and salvage corps. The first extinguish the fire—very often before it has made much progress—and the second save the goods as far as they can. Suppose, for instance, a fire has affected three rooms in the house and the rest of the rooms are damaged by water, the amount of that loss, by both fire and damage, will be paid by the insurance company when the amount is determined by the assessors or when the damage is repaired and the bills come in, but the payments will not exceed the amount of the damage. In this way the insured person is "indemnified" for his loss.

There is one point with regard to indemnity which the insured person must never forget, and that is that the fire insurance company pays on the value of the damaged article at the time that the damage is done. A typical case is that of a cinder falling out on a carpet and setting it on fire; the carpet might have cost, say £30 when it was new, but the compensation will be paid on its value at the time of the fire and not on the cost of replacement with a new one, unless the damage is total. The reason for this is quite clear. If the insurance company undertook to replace the damaged article by a new one there would be hundreds of people who, whenever they wanted

a new carpet, would damage the old one and claim from the insurance company. Therefore in estimating the amount for which the article ought to be insured, the actual value and not the replacement value should be considered. For instance—talking of carpets—there are many real Persian carpets which have been down for forty years or more, but owing to scarcity they are now worth three times as much as was given for them in the first place.

## Removal of Goods.

There is another point he should remember and that is that the conditions of the policy usually insure his goods as long as they remain in the place where they were at the time that the insurance was made. If he stores them elsewhere as for instance in a covered shed at the bottom of his garden, he would do well to advise the insurance company, for it might easily happen that the shed is more readily inflammable than

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THE EXPORT PACKING DEPARTMENT IN A BOOT FACTORY

## An Inventory Necessary.

Arising out of this point it is very desirable to have an inventory. In the case of the small business, a properly kept stock book is the best way of ascertaining what the amount of the insurance should be. If there should be a fire a claim can always be substantiated by the actual books, and if confirmation is necessary the wholesaler can supply it. The shopkeeper can never go wrong if he bears in mind that he is insured to obtain an indemnity and not a replacement, although the insurance company has the option to replace if it thinks fit.

the house, or may be situated at a more dangerous point. For instance, it is bad if it abuts on a footpath serving the back of the houses in one street, where a passer-by might either carelessly, or on purpose, fling a match over the fence and set the whole place in a blaze. Equally, if the insured has no room in his house for some of his household goods and is keeping them stored in a respository in the meantime, notice must be given to his insurance company and the additional rate paid. It happens constantly that fires take place in depositories when the additional premium has not been paid, and there is intense annoyance to all concerned, since the policy has become invalid.

## Average.

It is not absolutely necessary at present to insure the house to its full value, because so far the doctrine of average does not apply to the insurance of houses against fire, but it is desirable to insure for a sufficient sum to rebuild the house from its foundations, otherwise in the event of total loss the difference will have to be made up by the insured person. However, there is no doubt that, within a reasonable time, house property will be brought within the doctrine of average and it is therefore necessary to explain what the doctrine of average is. Remember insurance of stock is often subject to average.

If the stock cost, say, £1,500, then the full value at which it should be insured is £1,500, but if the owner insures only £1,000 with the company, he has clearly insured the other £500 with himself. He is taking his own risk. If the place and contents are destroyed by fire he is his own insurer to the extent of £500 on his stock, and must therefore suffer one-third of the ascertained loss and the company two-thirds. In the particular case of total destruction, the doctrine of average cancels itself out, but if the damage done was only £500 and the insurance policy is for £1,000, the remaining £500 of insurance being held at owner's risk, the insurance company is not bound to pay £500 but only two-thirds of that sum, the other one-third being payable by the other insurer—who is the owner himself.

The existence of this doctrine of average makes it very necessary to examine carefully the true value of the stock-in-trade. After all, the cost of fire insurance is comparatively small in relation to the amount insured, and care at the beginning may readily save a great deal of trouble later on if the event insured against should happen.

Finally, in insurance it is very necessary to be quite sure if the articles insured are subject to average. We have already said that a house and its furniture are not subject to average and the full value up to the sum insured would be paid if damage be done, without considering whether the insured person has insured full value or under. It is, however, quite certain that in time an arrangement will be arrived at which will make everything subject to average and there is, therefore, need of the care we have already suggested.

## Employing an Agent.

The enormous development of the practice of insurance and its extension over all kinds of objects which were not dreamed of thirty years ago, make it very desirable to effect the business through a skilful agent, preferably with one whose record is familiar to the insured person. It is equally important, as we have said before, to make sure by examination of the balance sheet that the company he suggests be strong and well established. Speaking generally, the agent would naturally try to put the person insuring with him into a sound office because he has his living to make. He would certainly get into trouble if he put his customers into an unsound office which lets him down if a claim has to be paid. Yet that is frequently chanced for the sake of an extra commission from the weaker office.

It often happens that the cupidity of the small tradesman leads him to allow himself to be appointed agent for the sake of the agent's commission. There is at this time a strong agitation against this practice. Indeed, the group known as the Corporation of Insurance Agents and Bankers are moving Parliament to institute a system of licences for persons who wish to practise as insurance agents or brokers. Their reasons are based on much the same grounds as govern the annual licensing of solicitors, auctioneers, and other persons practising a trade or business wherein a special knowledge is necessary. It is very doubtful if the Corporation of Insurance Brokers will be able to carry such a measure for some considerable time, but the trend of opinion is moving their way, provided that some means can be found of protecting the interests of the insurance companies, who dare not entrust the growth of their business to the goodwill of the members of any monopolist corporation.

The reason why the small man should not let himself be made an agent for his own business is that, in the event of claims arising, the skilled assistance of the expert agent, in helping him to put forward his claim, is of very great value. After all, it stands to reason that the broker, doing good business with an insurance company, has special influence with the company. The person who is merely an agent for the sake of commission on his own policies cannot have influence to anything like the same degree. Nor is it wise for the tradesman to allow himself to be persuaded to change from one office to another—assuming that he has wisely chosen in the first instance. It may be years before a claim has to be made, indeed it may be never, but there is no doubt that a man who has been insured in the same office for years will be more favourably considered than the man who has only been insured for a few months and has the reputation of changing from one office to another merely to oblige an agent.

The prime consideration is that he ought to keep an agent, an experienced man, by his side to prepare his claim if, unfortunately, a claim has to be made.

## Consequential Loss.

Before we leave the subject of fire insurance, the question of consequential loss in the event of fire has to be considered. If we come to think, the loss caused by fire destroying the business premises is not all there is to it. The insured person's

source of income is destroyed. If he has not insured the rent, he has usually to pay it to the landlord, although the house is burnt down. If he has accommodation from the bank, the interest will have to be paid. If he bought the house and raised money on it by mortgage, mortgage interest has to be paid, whether the house is standing or not. The ordinary fire policy in such tradesman who sits down to think them out, can be covered to-day by a policy of assurance against consequential loss. The exact working of such policies requires explanation by an agent. In the case of businesses the measure of the loss is usually fixed on the basis of loss of turnover.

It must be remembered, however, that consequential loss policies are only issued by insurance

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A Shop Interior

Planned to make the most of restricted space.

a case would be in the hands of the mortgagee, but if the tenant desired to rebuild the house, he would probably have to arrange to take the compensation and for a continuance of the old mortgage or the negotiation of a new one. There are also running contracts with employees, purchase contracts with wholesalers which have to be paid, notwithstanding the fire.

All these items and many others which need not be particularized, for they will occur to any companies to persons of high moral character and good business reputation, otherwise it would be unsafe to enter into the business. Even good moral character may not carry the policy through if the proposer is occupying only part of a building, for the simple reason that in that building there may be a person quite prepared to set his place on fire to save himself loss by depreciation or merely to defraud a company, and therefore the whole building is liable to be destroyed through

the act of one of its tenants, over whom the insured would have no control.

Another point, which the companies consider before issuing these policies, is the kind of terms on which the insurer stands with his employees. It happens constantly that where the employer is on bad terms with his employees, some malicious one of them, who cannot be traced, sets the place on fire so as to avenge himself for some ill treatment, fancied or otherwise.

The reader will understand that where he goes to the expense of installing safety appliances he will get a better rate from the insurance company. No doubt he will realize that the cheaper the premium the better the risk and the better it is for the insurance companies. The biggest losses invariably occur in the more heavily rated risks, and it is no desire of the insurance companies to charge high premiums for big risks. Their safest profits are derived from low premiums for small risks. If on examination of a draper's shop, for instance, they find that he has had sprinklers installed all over the place, it will make a very considerable difference in the premium payable. Of course, in the bigger risks, such as cotton mills and flour mills, the cost of installing sprinklers would be very quickly repaid by the diminution in the fire premium.

## The Wording of the Policy.

Nothing in fire insurance is more important to the insured than taking care that the wording of the policy so reads that the policy affects everything it was meant to do.

In the first place, in the case of a business man, he must be quite sure that the instructions he gives to the agent as to the extent of risk to be covered do in fact include the whole protection he wants. When he receives his policy, he should study it very carefully to make quite sure that it expresses all that he intended it to express, and if he has the slightest doubt about the meaning of the words, he should see the agent and get it made clear. If the agent says it is clear, it is as well to write him a letter confirming the conversation and expressing the understanding arrived at with the agent and requesting an acknowledgment so that no difficulty can arise later on.

The proposer should always remember that the agent's power is usually limited to granting temporary cover for three or four days until the office decides as to whether or not it will accept the risk.

Payment of premium to the agent is, in law, a payment to his company, and it has been held by the judges that any knowledge the agent has about the character of a risk is equivalent to knowledge of his company. If the records are searched it will be found that half the difficulties that may arise depend on whether the proposer told the agent everything he knew about the risk or whether he did not. It often happens that a fire assessor examining a loss, discovers conditions which would have prevented the company, either from assuring the risk at all, or from assuring it without a substantially extra premium. In such cases it invariably happens that the person assured asserts that he told the agent all about it and the agent asserts that this is the first time he has heard of it. It is therefore always advisable when doubtful points arise, to have the transaction recorded in writing.

# CHAPTER II

# LIFE ASSURANCE

THERE is no doubt that the next step for the tradesman to take after providing for insurance against fire, is to consider carefully the question of insuring his life for such an amount as he can afford and as may be necessary for him to cover his family in the event of his early death, or to hand over to his bank in case he requires accommodation from his bankers.

There are a great number of insurance companies transacting life assurance in this country, and it is not necessary to specify any one as being at all times and in all cases preferable to any other. The one thing we do advise is that the prospective insurer should not be—as he often is—influenced by the difference of a few pence, or even a couple of shillings per cent, to choose the cheaper office. Cost is, of course, a very important consideration, but in life assurance, as in fire insurance, the question of security is paramount.

## Valuation Basis.

There are at least three methods of deciding the question of the stability of the security of any company. First look into the basis of valuation it adopts. This requires to be explained.

The principle of life assurance is based on the tables of mortality prepared by actuaries after careful study and long investigation. Actuarial science has established these tables, which show the average expectation of life at a given age. For instance, a man aged 30 may reasonably be expected to live 35 years on the average. In practice some live longer and some die sooner, but the premium which has to be paid is based on the assumption of the average duration of life of a person aged 30, and the same is true of all other ages. In fixing the premium, account has to be taken of the net rate of interest which may be expected to be earned during the whole time of the existence of the policy, because, of course, the premiums paid, after providing for the expenses of the office, have to be invested. Their amount is fixed on the assumption that the excess

premiums will be invested in securities which will return not less than 3 per cent net. In such a case the 3 per cent is called the valuation basis.

The law provides that a valuation of the assets and the liabilities of an insurance company should take place at least once in every five years. The assets are easily valued; the whole of the documents constituting the securities are examined yearly by a committee of the directors of the company and inspected by the auditors, who certify that they have examined these securities, and the value put upon them has been agreed to by experts.

With regard to Stock Exchange securities, a certificate is usually obtained from some leading firm of stock-brokers that the value put upon them is not more than the price at which they stood in the Stock Exchange on the date on which the valuation is made.

With regard to mortgage securities, very frequently an inspection is made by a firm of surveyors who report as to the value. The same course is taken with regard to investments in houses and other property belonging to the insurance company. The actuary of the company, very often with the assistance of an independent actuary, checks over the values at which loans on life interests, reversions and securities of that class have been made. In every case where values have depreciated the loss has to be written off before profits are divided.

The next item is to check the liabilities which the company has under the policies it has issued. The liability under each policy is the amount of the insurance fund set aside as provision for the reserve on that policy. The value of the future premiums, less estimated expenses, the money that has already come in to form the reserve, and the money due to come in as premiums are paid year by year, represent the liabilities of the company to its policy-holders.

Naturally the assets should be more, and nearly always are more, than the liabilities and the surplus is usually distributed by way of bonus to those policy-holders who have insured to participate in the profits of their company. Where the safety of the policies is fortified by the existence of share capital, then a proportion, usually 10 per cent, goes to the shareholder.

## Sources of Profit.

Now these profits arise from three sources: the first is the excess of interest earned during the five-year valuation period over the interest which would have been earned had the return only equalled 3 per cent. For instance, if the interest earned after payment of tax was £4 6s. 7d. per cent, then on every £100 worth of investment there is a profit of £1 6s. 7d., and in a company whose assets amount to £10,000,000, the profit from that source would be, in round figures, £130,000 a year for each of the five years, constituting on that head alone, a surplus of about £650,000.

The second source of surplus, which tends rather to diminish as the cost of living increases, is the profit made upon the saving of expenses. Most offices add to the premium actually required for paying the claims, assuming that interest can be earned at 3 per cent net, a sum of about 17 per cent of that premium to provide for the payment of expenses. As many offices conduct their business at an expense rate of not more than 12 per cent, the 5 per cent surplus goes to add to the profits of the working. Unfortunately in these days of high prices working expenses tend to increase.

The third source of profit lies in the survivorship of people over and above the age at which they might be expected to die. In many cases that surplus is considerable. Returns of certain cases show that only 60 per cent of the people who were expected to die in 1921, did die. The money is in hand to be paid in case the other 40 per cent had also died, but as they did not die, an additional profit arises, not very large because, of course, they will die sooner or later, but still very useful for adding to the surplus disclosed at a valuation.

There are some companies which value their position on the assumption that they would be solvent even if only 2½ per cent interest were earned on their investments and, of course, they are in a strong position, but there is nothing hard and fast about a valuation basis provided it does not exceed 3 per cent. Some people think that an assumption of only 2½ per cent, and the building up of an additional reserve fund necessitated by so low an interest figure, makes the company unnecessarily safe and holds back from the policy-holders an amount which might otherwise come to them, but is in fact used to augment reserves.

That is entirely a matter of opinion and is not a conclusive argument against going to an office assuming the higher rate of interest.

Although all this sounds very technical, it is really quite simple and can always be further elucidated in conversation with any company's representative. To a man with a taste for figures, it is a rather fascinating study to try to work out how these methods are carried out in practice.

## Insurance Companies' Reports.

There was a time when the reports of the insurance companies for each year's working, which have to be filed with the Board of Trade, cost only a few shillings. But since the Government have started doing their own printing the cost of this book has been raised to £7 18s. a copy. Naturally members of the public cannot afford to pay any such sum for any such book.

The whole of the publicity to which the public are entitled in accordance with the intention of the Insurance Act of 1870 is thus kept back from them. There is, however, some hope that common sense will prevail, and steps are being taken to remedy what is, in fact, an intolerable grievance.

Manifestly a man should choose his insurance company after carefully considering the balance sheets of the various companies claiming his patronage. Great size does not necessarily mean that the office is stronger than one of relatively small size, because the liabilities are equally large in proportion to the assets. In other words, where the assets are large the liabilities are necessarily large also. Sometimes it is better to select a relatively small office working on a lower expense rate than a big office working on a high expense rate, which very often has greater difficulty in distributing its investments over a wide field than the smaller office which should be able to give more attention to the details of its investments.

## Different Classes of Policies.

Having finally selected an office to insure in, the trader desiring to take out an insurance will have to decide what class of policy to take. Broadly speaking, insurance companies issue policies with the premium payable for the whole period of life, policies with the premium payable for a limited number of years and, finally, policies with the sum insured payable either at a given age, or in a given number of years—from ten to forty as the case may be. Naturally the term of years depends on the age of the person who is insuring himself. For instance, it would not be wise for a man of forty to take out a policy maturing in forty years. He would want the money sooner.

Every one of these policies is issued by the companies "with" or "without" participation in the profits. Where there is participation offered, naturally the premium is higher. It is not always easy to advise whether a man should insure with or without participation; it depends so much on the special circumstances of the case. A young man with a young family might do better by insuring at the cheapest possible rate. Later on he can change over to the "with" participation rate in almost any company and the turnover would be made on equitable terms.

For the purpose of collateral security to a bank, it is probable that an endowment policy is more useful, because it is of greater cash value at any time.

The question of participation in profits is also affected by the method adopted by the company concerned of distributing its surplus profits among the policy-holders. Some offices, for instance, allot a bonus in cash in proportion to the profits earned during the valuation period, and if the premium be high, as would be the case in an endowment assurance, the person assured at a high premium would benefit rather more in proportion than the policy-holder at the lower premium. For example, if the premium at £10 a year has been paid for the five years of the valuation period and the bonus to be divided equalled, say, 33⅓ per cent of the premiums received, then the cash bonus allotted to the policy-holder would be one-third of £50, say, £16 13s. 4d. In the same way, if the man were insured for the same amount, but on a fifteen-years' endowment policy at a premium of say, £7, he would receive one-third of £35, or £11 13s. 4d. The difference is that if he applied his cash to increasing the sum assured, he would in the one case receive the additional sum added by the bonus, plus the original sum assured for at the end of the fifteen years from the beginning of the policy, or at previous death; whereas if he is insured under the "whole of life" term the additional sum assured would only come with his death.

## Insurance a Form of Thrift.

In any case, the feeling is generally established amongst smaller people that insurance is a form of thrift and that an endowment policy in a good office provides the safest investment conceivable for the money, with a substantial profit added when the time comes to draw the money out at the end of the endowment period.

The question of income tax is important, for a man is allowed to deduct the insurance premium from the sum assessed against him as his liability for income tax, provided it does not exceed a certain proportion of his income. This, at the present rate of income tax, is a great boon to the small man and is in fact an added profit on his policy.

## Drawback to Endowment Policy.

There is a drawback to the endowment policy which has to be considered. Suppose a man at the age of 25 takes out an endowment policy payable in twenty years, or at the age of 45. Suppose in the interval his health has deteriorated and at the age of 45 he finds himself ineligible for further assurance, he has to take the cash, and it may be that at that particular moment he is just in the real stress of finding employment for his elder children and education for his younger. In such a case it is clear that he would have done better to have taken the larger insurance which the same amount of premium per year would have found had he taken the "whole of life" policy. He would thus continue assured and, in such a position, he needs nothing more useful than an insurance policy.

## Considerations.

It will be seen that there are many considerations to be studied before a definite decision is

made as to the class of policy to be taken out. Nevertheless too long a time should not be spent on such considerations, because undoubtedly the primary duty of the man for whom we are writing is to get insured. If he is married at the time he contemplates opening business, a life policy becomes an imperative duty, for if he were to die young, the policy money would probably enable the wife to carry on the business, with adequate assistance, for the benefit of herself and her children.

Suppose a man finds he is able to save a few pounds out of the income of his business and considers how best he can invest such small sums. It may be—and indeed very often is—a good way to put them back in the business, but on the other hand, it is not always advisable to put all the eggs into one basket.

The second way may be to yield to temptation to buy a few shares in an industrial concern, which is always in the nature of a gamble, or else to buy War Saving Certificates which are excellent in their way but for the very considerable period which elapses before the interest is added to the original investment. Or he may decide to take additional insurance on his life.

There are advantages in either the first or last method; the special advantage of the last is that once he commences to save by means of paying insurance premiums, he will have entered upon a kind of obligation to save. In time it will become a habit. After two or three years, the payment of the premium becomes almost automatic.

## Investments.

There is nothing at all to be said for the second method, because the chances are that the man will lose his money. Such small investments are very difficult to make and are entirely outside any control by the investor himself. Millions of pounds are lost every year by thrifty people who indulge in small investments on the strength of either a tip received from a customer or a friend in the City, or a casual acquaintance, who advises the man to follow his lead, and gets a commission for doing so. In short, it is hardly practicable for a man to deal with a less sum than £100 if he contemplates investments in shares. Far better is it to put the savings into his own business, but if he is in any doubt on the subject, there is no question that his best course is to increase insurance for an endowment term not exceeding twenty years.

## Other Advantages of Insurance.

There are many other small advantages connected with insurance. In the first place there are practically no formalities to be attended to once the policy is issued. There is practically no trouble when it becomes a claim, either by death or by maturity. In the first case, the companies pay at once on receipt of probate or letters of administration legally entitling them to pay the administrator or the executor. In the second place, all the man has to do is to go to his insurance company with his policy and, subject to the existence of any assignment or transfer of the whole or part to a third party whose title has to be established, he can get the money within forty-eight hours or less.

Considering all the millions of policies which exist in Great Britain to-day, it is true to say that the greater number of the population, including those who are insured, are under-insured. We know of numbers of people earning as much as £1,000 a year who are insured for, say, £1,000, and who live well up to the rest of their income. The lodging houses in Camden Town are kept by widows of such as these. These good women feel most acutely their fall from a moderately easy position to the shabbiness of such a life.

We are not imaginative people, or we should realize what such struggling with penury means to a widowed woman, especially if she has three or four young children. Never having experienced a real hardship makes it all the more difficult. If the husband were a shopkeeper, the policy of £1,000 would save her, as we have said already, but if he were, say, an estate agent gradually building up a business, or an accountant in a small way, or indeed engaged in any professional occupation, his whole capital in the early days stands on his two feet, or in other words, is hidden in his brain, and if he dies, the loss is complete.

## Medical Examination.

When a man has decided on the office in which he will insure and has signed his proposal form to that office, he has usually to undergo a medical examination. A great many people hold off from insuring on account of the necessity of this medical test. It is extraordinary how many people are afraid to be told the truth about their state of health, and the agent generally has some little difficulty in persuading his customer to go to see the doctor. Yet, if we come to think of it, such a medical examination is of great advantage to any man, for if he be suffering from any defect, his life can very often be saved by finding it out in good time. It is true that policies are now issued by insurance companies of the very first standing without medical examinations at all, but it is not advisable to avoid the examination even in these companies, because declarations have to be signed and must be signed truly. Any concealment of fact may readily be fatal to payment when the claim becomes due. Too much care cannot be exercised in any statement made to an insurance company since the law lays down that the essence of a valid insurance must be the most perfect good faith on both sides.

On the whole we should advise every man to be examined, if only for the great advantage of an opinion as to his health expressed by a man who has been chosen with great care to be the medical officer of an insurance office and, therefore, usually a man of high standing in his profession.

## Options of Settlements.

A distinguishing feature in modern insurance, which no doubt was adopted at the time when the American Tontine contracts were so much in favour, is that granting various options to the policy-holders with regard to the settlement of their claims when they become due. This provision adds a new and important duty to the ordinary business of life assurance companies.

For instance, suppose a man leaves a lump sum in insurance to his beneficiary who has the right to take that lump sum from the company in instalments spread over ten or fifteen years, then it is necessary for the assurance company to make proper provision for handling the capital sum which is left in their hands. The same remarks apply to the case where a man having insured his life desires to leave his wife, or other beneficiary, the interest on the amount insured during her lifetime and afterwards the money is to pass to a third person nominated either by her or by him. Or, arrangements may even be made to specify how the proceeds shall be made payable to each of the children or, alternatively, if the children at the death of the first beneficiary are under age, the policy money representing their share shall be retained at interest until they reach the age of 21.

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A Packing Department in a Boot Factory

## Educational Endowments.

Then there is the educational endowment, under which, as we all know, the insurance companies undertake to pay, for either four or five years, instalments which are to be applied to the cost of the child's education, their contract ending at the end of the fourth or fifth year.

This insurance is quite common and very cumbersome, and it is much better for the parent to insure his or her life by taking an endowment

policy to mature at the date when it may be expected that the child will begin to go to school. The advantage is, of course, that if the father or mother should die before that period arrives, the money can be paid to executors and applied later on to paying the instalments; also there is the saving of premiums between the father's death and the child reaching the school age. Likewise income tax may be deducted. In fact, options in settlement of this kind can be agreed in the policy.

Notwithstanding the attractiveness of such a form of settlement, the result can be equally obtained by a provision in a will. If, however, the insurer should prefer a settlement in the terms of the policy, then he must be very careful that the wording of that policy corresponds exactly with his idea of what he wishes to effect, and is within the ordinary law.

Meantime there is no doubt that the policy-holder has such reliance on the skill and honourable conduct of the insurance companies that he prefers to entrust them with the duties to his beneficiaries which they offer to perform under their contract.

### Another Form of Option.

There is another form of option which is also quite attractive and to some extent founded, like the others, upon the American Tontine options. Provision is made by which a man is insured for a certain sum in the event of his death on either a twenty-payment life policy or a twenty-year endowment policy. At the end of twenty years the various options are conceded to the insured. In the case of the endowment, he may, for instance, take the money, or take part of the money, and apply the rest to continuing his insurance, or continue his insurance for a sum previously agreed and take the balance in an annuity for the rest of his life, or he may apply the whole sum to the purchase of an annuity. Such policies are of very material assistance to the agents, because a great many men who might not otherwise insure their lives are attracted by their flexibility coupled with their definite contracts. We know very well that in effect what the man gets is the £1,000, and the options are only another way of saying the same thing, but the fact that they are there does place some additional expense on the insurance company in administrating, unless the man takes the cash, one or other of the various settlements available.

As far as we can judge, this form of insurance is gaining ground, particularly in the direction of what is called "Early Provident" or "Children's Assurance," where a parent may insure his child on the very day of his birth by means of a policy which comes into full benefit at the age of 21 and provides for the return of all the premiums in the event of the child's death before attaining that age. There can be no cheaper means of providing for the future of a child. He will probably have to insure sooner or later, and, if a start is made on this principle at an early age then the cost of annual premiums on reaching the age of 21 is ridiculously low, whilst the cash value on the twenty-first birthday is substantially high in the event of discontinuance of the policy at that stage. Here again there are many choices of settlement open when the age of 21 is attained, so that a selection may be made which will accord with the situation of all concerned at that date.

## CHAPTER III

## WORKMEN'S COMPENSATION INSURANCE

The next point of danger against which the small man in business ought to insure is workmen's compensation. From the very beginning he has to employ some assistance, even a man in the shop or an errand boy, and if an accident happens to either one or the other whilst he is engaged in his occupation, compensation has to be paid on a severe scale embodied in an Act of Parliament.

### Risks.

Suppose the errand boy, delivering goods, falls off his bicycle, he may easily break his leg and be laid up for a considerable time whilst his employer has to pay the compensation provided. If he be injured and disabled, for at least one week, from earning his full wages, he has to receive one-half of his average weekly earnings during the whole time of his incapacity. Likewise if he suffers from any one of the thirty diseases specified due to sickness following contact arising out of his occupation, the same benefits apply. Amongst such diseases are anthrax (due to handling wool, hair, bristles, hides and skins), mercury poisoning, phosphorous poisoning, arsenic poisoning due to handling arsenic, or lead poisoning due to handling lead, or skin disease produced by dust or liquids, or ulceration of the skin or of the eye, or glanders caught from use of horses. The same compensation has to be paid for such sicknesses as for accidents.

If the boy is killed by being run over by a motor-car, then a sum of compensation not exceeding £300 may have to be paid to his parents if they claim to be partially dependent upon his earnings. In such a case there may be an indemnity against the driver of the motor-car, but certainly in 75 per cent of the cases where a boy on a bicycle is killed in a motor accident, it is the boy's own fault for reckless and foolish riding, and unless an insurance has been effected, the employer would have to pay the relations, subject to his chancing a law suit against the owner of the motor-car, lorry, or whatever did the damage. The rate of premium for such insurance

in the case of an ordinary shopkeeper would scarcely be more than 5s. per cent, unless some dangerous occupation were carried on.

In the case of the retail grocer, for instance, there are various rates of premium, depending upon the nature of the business. Grocers without any machinery, such as a coffee mill, or a machine for cutting bacon, or grocers with a licence for selling intoxicating liquor have to pay a higher premium than the man who has neither a licence nor machinery. A clause in the policy states that the grocer is insured on the understanding that there is no sale of wine, spirits or beer or any use of apparatus driven by machine power. If there is no licence, but machinery is used, a different endorsement is put on the policy. Then, again, the grocer with a licence for the sale of drink may not have any bottling apparatus driven by machinery, although there may be other machines in use for bottling. There are many possible variations.

We mention grocers in particular because the

*By permission* *E. Pollard & Co., Ltd.*

A Well-arranged Arcade

classes of business they carry on do differ in these and other ways one from the other.

## The Policy.

The whole question of workmen's compensation must be examined very carefully when the small trader proposes to an insurance company to have a workmen's compensation policy. He must carefully consider the contract and other documents handed to him by the agent and make sure that his own particular case is covered by the wording of the policy.

It is expected that very soon a new Workmen's Compensation Act will be made law, and that, among other things, it will compel the employer under severe penalties to insure. Practically all employers, except quite small men, are insured now, for the risk is too complicated to ignore or to be carried by the employer himself. It is far better to get proper cover and leave it to the insurance company to fight a case if fighting becomes necessary, or to adjust the compensation by its experts, if compensation is due.

There is hardly a single case in which an employee meeting with an accident does not do it while in the course of his employment. There are all sorts of judicial decisions on the meaning of the words "in the course of his employment," and practically every one of these decisions has widened the scope of the Act and includes all sorts of matters which were never considered at all when the Act was passed. For instance, a man in a workmen's train going to his work and meeting with an accident has been held to have met with it "in the course of his employment."

## Benefit.

This is not the place to go at any length into the details of the Act of 1906 and the various Acts passed since then in 1917 and 1919 to increase the amount of benefit. Under the Act of 1906, as we have said, the compensation payable is half the wage during the total incapacity. In 1917 Parliament added an additional compensation of one-fourth of the amount that could be claimed under the first Act. In 1919 a new Act substituted three-fourths of the amount due under the Act of 1906 for the fourth provided by the Act of 1917. So far all these Acts are in force, and will probably remain in force until the new Act is passed. Then insurance will be made compulsory, and all doubts as to its advantage will be solved by the heavy hand of the law. Of course, if death ensues, heavy lump sums may have to be paid to the dependants as shown below.

## Amount of Liability.

The exact amount of liability to be paid to injured men under the various Workmen's Compensation Acts, varies according to the weekly wages paid to the employee, and the qualifications as to claims laid down in the Act and in the many court judgments qualifying its meaning. First of all the accident must arise out of, and in the course of, the employment. Secondly, the workman must be disabled for at least one week before he may claim compensation. If the incapacity lasts less than two weeks, no compensation is payable in respect of the first week. Thirdly, the workman may sue for damages independently of the Act, but if he does he has no recourse to the easier remedy provided by the Act. Where the injury is attributable to the workman's serious and wilful misconduct, he forfeits the right to compensation unless the injury results in death or permanent disablement.

If an employer employs a contractor for the purposes of his trade or business, to execute under a contract the whole or any part of any work undertaken by the principal employer, he becomes liable to pay the sub-contractor's workmen if a claim arises. For instance, if a builder employs a sub-contractor to do plastering or painting, and an accident happens to a man employed on the job by the sub-contractor, then the principal is liable. There are exceptions. One relates to agriculture, where if a contractor provides and uses machinery driven by mechanical power the contractor alone is liable.

Furthermore, if in such cases as the building we have referred to, the accident occurred elsewhere than on, in or about the premises on which the principal has undertaken to execute the work, the principal is not liable.

## Scale of Compensation.

This is not the place to go into the whole of the conditions of the Act of 1906 and its succeeding Acts, but it is interesting to know what the scale of compensation is—

(*a*) Where death results from the injury—

1. If the workman leaves total dependants, a sum equal to his earnings with the same employer during the preceding three years, with a minimum of £150 and a maximum of £300. Any weekly payments made prior to the death will be deducted from this sum. If the workman has been less than three years in the service of his employer, his three years' earnings are arrived at by taking 156 times his average weekly earnings.

2. If the workman leaves partial dependants only, such sum as may be determined by agreement or arbitration to be proportionate to the injury to those dependants, not exceeding the sum of £300.

3. If the workman leaves no dependants, medical and funeral expenses up to £10.

(*b*) Where total or partial incapacity for work results from the injury—

A weekly payment during incapacity, not exceeding 50 per cent of the workman's average weekly earnings during the preceding twelve months, or any less period during which he had been in the service of the same employer.

The Workmen's Compensation (War Addition) Act, 1917, increases the above scale of compensation and is still in force, pending the codifying of the whole of the workmen's compensation

legislation and amending it in accordance with modern necessity. The Workmen's Compensation (War Addition) Act, 1919, has also increased compensation due to a workman. Mr. C. E. Golding, in his interesting book on the Acts in question, expresses the meaning of these amending Acts in the following language—

WORKMEN'S COMPENSATION (WAR ADDITION) ACT, 1917.

This Act was passed to meet the increase in the cost of living occasioned by the war, and to bring the scale of compensation under the Act, 1906, more into line with current needs. It applies only where a workman is entitled to a weekly payment under the Act of 1906 in respect of *total incapacity*, and provides for an addition to that weekly payment of one-fourth of the amount, so that a workman receiving compensation of 20s. per week would have it increased to 25s. per week. This additional sum could not be redeemed by a lump sum payment (under Paragraph 17 of the First Schedule) even though the original weekly payment might be so redeemed. It may, of course, be redeemed by agreement between the parties. The Act came into force on 1st September, 1917, and is to continue in force for a period of six months after the termination of the war. This Act, together with the amending Act of 1919, has been extended, under the Expiring Laws Continuance Act, up to 31st December, 1922.

WORKMEN'S COMPENSATION (WAR ADDITION) AMENDMENT ACT, 1919.

This was an amending Act to increase the addition to the weekly payments provided by the Act of 1917. By this Act the increase instead of being one-fourth, is to be three-fourths of the amount provided under the Act of 1906. Thus, a workman receiving 20s. per week compensation under that Act would now receive 35s. per week. The 1919 Act goes a step further, and provides that the additional amount shall also be added to any weekly payments which may be in force under the Workmen's Compensation Acts 1897 and 1900, thus remedying an unintentional omission under the Act of 1917. The Act of 1919, being an amending Act, stands or falls with the Act of 1917, and the two Acts are cited together as the Workmen's Compensation (War Addition) Acts, 1917 and 1919.

The present Expiring Laws Continuance Act carries these obligations on for another year.

A study of these scales of compensation renders it very evident that workmen's compensation insurance is absolutely necessary for every employer of labour, great or small. Neglect might even involve disaster especially to the small man.

It is believed that one of the provisions of the new Bill which will shortly be laid before Parliament will make workmen's compensation insurance obligatory on everybody. Therefore the sooner any intended or necessary assurance of this kind is put through the better. The rate of premium varies very little whichever office is chosen. Weaker offices are apt to quote more cheaply.

## CHAPTER IV

## BURGLARY AND GUARANTEE INSURANCE

At the time of writing there is an organized gang of receivers of foreign race and origin who have surrounded themselves with a band of expert thieves. They have provided these thieves with fast motor-cars and appointed rendezvous in various parts of the country where they may take stolen goods. Most of their biggest crimes have been committed under the eyes of the policemen on their beats, who, being ordinary unimaginative but solid and courageous men, seem to take no notice of a motor lorry loading up goods from a warehouse, which, indeed, they believe to be merely in the ordinary course of the warehouseman's trade. In this way tens of thousands of pounds' worth of property has been stolen lately, particularly cloth, silk and carpets. In one case in Cheapside something like £9,000 worth of silk was taken away like this on a Saturday afternoon.

There are other gangs of organized thieves who burst into shops or post offices, and hold up clerks at the counter, while they rob the till. If the business be a jeweller's, they fill their pockets with rings, watches and bracelets and other articles of the jewellery trade, but more usually in smaller shops they are content to steal the contents of the till. Usually they are armed with Browning pistols.

Yet another gang are expert in stealing safes, which they take away on small lorries and open at their leisure somewhere in the neighbouring country, taking out the contents and leaving the safe itself broken and worthless.

It is impossible to take up a paper any day of the week without reading about these or similar crimes. Every now and then gangs go so far as to shoot persons interfering with them. They cannot be large gangs because there are times when a few of them find themselves in prison and the crimes seem to cease. But these minor rascals who get caught very rarely disclose the names of the receivers, nor do the receivers, if they are caught, ever give away the names of the men who stand behind this vast criminal conspiracy, who must have vast gifts of organization. The very success of the criminal proves this, because the average burglar is not a man of any special capacity; he merely possesses the gift of obeying orders without any prolonged discussion.

### Insurance Against Theft.

Insurance provides a remedy to some extent against crimes of this sort. It offers all kinds of assurance against all usual forms of theft. It is a contract of indemnity just as is fire insurance. That is to say, it pays compensation for the actual value of the lost goods at the time they are lost. With regard to jewels, the ordinary method is to have them valued by a recognized expert and insure them for the total value stated. But even then if the value changes by the time the loss is made, compensation would be paid on the new

value rather than on the value insured. The rates of premium for the contract effected by a policy against burglary and larceny vary very considerably according to the character of the risk. Obviously, it must cost more if the goods are in a lock-up shop or warehouse where nobody lives at night-time, and where the opportunity of getting away with the "swag" is more in favour of the thief than if somebody is there ready to raise the alarm. Again, the rate must vary according to the extent of the risk. For instance, if a West End jeweller wants to be protected in the event of robbery of goods in the possession of a messenger taking them to a hotel for approval by a customer, then there are additional chances of loss over those whilst they are in the shop. The messenger may be attacked in the street, or fooled by a plot, as happened some time ago at one of the great hotels. The goods disappeared whilst the alleged customer took them into the next room on the pretence of showing them to his wife, and escaped through another entrance into the corridor and so out of the hotel. In the case referred to, the handle of the door through which the thief got away had been unscrewed on the inside and the moment the thief was through the door he removed the handle and pin and left the pursuers shut in, so that when they came to look for him they were prisoners themselves.

It stands to reason that the beginner in business ought to carefully examine how he can protect himself against crimes of this sort. He has to have regard to the cost and the nature of the risk. For example, nobody is likely to come and scientifically burgle a butcher's shop or a baker's. They might, of course, rob the till but that is a different matter. On the other hand, jewellers or drapers or fancy goods shops are very good marks for a burglar, and it is worth while for the owner to insure to the extent of the value of the goods open to be stolen and to cover the damage done by the burglars. It is very curious that a burglar is usually a person who likes to damage things; it is a fact noted in the psychology of criminals of this type that they love to damage things. After a burglar has been to a private house you will find the drawers pulled out and flung all over the place, their contents, if not stolen, defiled and trampled upon, the locks smashed—which is one good reason for not locking up anything in a house—the wainscoating kicked in, and the general impression left that a battle had been fought.

## What the Policy Covers.

A burglary policy covers the cost of this damage as well as the cost of indemnifying the loss. Unless specially provided, certain limits are imposed on these policies. For instance, they do not cover the robbery of money, but an arrangement may be made by which it can be agreed that a maximum may be insured if stolen from a cash register or a till, but some sufficient evidence would have to be given, either by the checking of the cash register or by an examination of the books, showing that such money should have been in the register or till. It will be seen at once that there is no real means of checking such a loss and a claim would depend entirely on the reputation for honesty which the claimant enjoys. Nothing could be easier than for a dishonest man to say that he had been robbed of £100 worth of Treasury notes, because everyone knows the difficulty of tracing the proceeds of such a robbery. The thieves will pass them into general circulation at the earliest possible moment. In the same way it is not usual for a policy to cover lost securities, stamps, documents or manuscripts, or a collection of curios and things of that sort. It can be done, but the insurer should discuss the whole matter very carefully with the representative of the insurance company with a view to discovering the exact nature of the risk which the insurance company is taking. It is possible to insure jewellery taken on a journey in the possession and under the control of the owner or against jewellery being lost by the wearer. One is constantly seeing in the newspapers a large reward offered for the recovery of a pearl necklace dropped by the owner somewhere between her house and the theatre or restaurant.

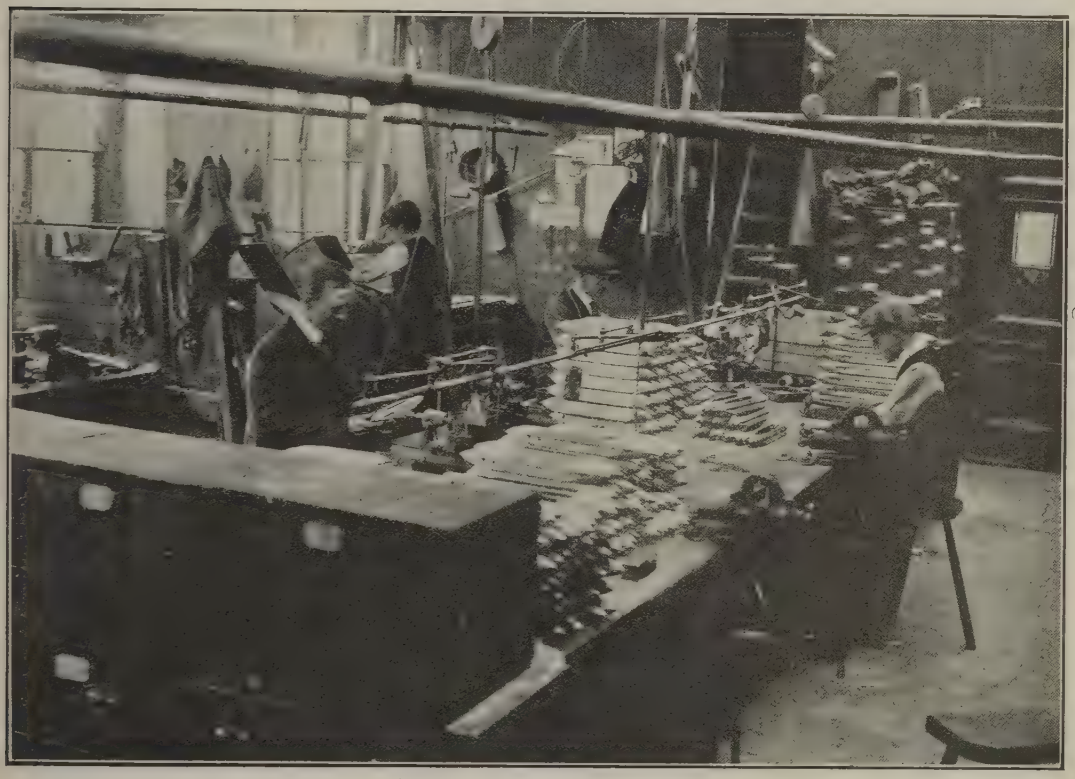
Robberies on the trains in foreign countries are very frequent, because it so often happens that the conductors, porters and guards of the trains are just common thieves. Until recently it was only possible to insure such goods whilst they were in France or Belgium. It was found necessary to bar practically all the other European countries, unless extravagant premiums be offered.

A person lives quietly from day to day for years and years and no one ever burgles him, or pick-pockets his watch or his tie-pin, until at last he thinks nothing of the sort will ever happen. Then one fine day it does happen, and if he is not insured he is so angry with himself that the thought of his folly gives him more distress than the loss of his goods. But theft insurance is a thing that the young man starting in business may have to do without, unless his is a hazardous trade, such as a jeweller's. Sooner or later, when he can afford it, it is wise for him to protect himself against this particular risk, exercising in the meantime special vigilance, which should be the more easy because he will probably be living on his business premises, at any rate at first.

## Guarantee of Employees.

The question of guaranteeing the fidelity of employees is one that will arise in a business sooner

or later. Employees engaged on delivery of goods, with authority to collect cash in payment for the articles delivered, have many opportunities of robbing their masters, but fortunately such crimes are relatively rare and therefore the premiums are low. There is not only the possibility of robbing the till, but of stealing goods from the shop. Suppose a man sets up as a draper, it is a serious loss if some employee steals a roll of silk; it may be covered in the general policy against burglary and larceny (that depends on the wording of the policy), but if it is a question of taking out a guarantee policy, then it is just as well to have the man guaranteed so that if he steals cash or goods, the master shall be compensated. Of course, in very large businesses, the whole of the employees are guaranteed as one man as a part of the condition of their employment. There is one special advantage in having an employee guaranteed by an insurance company, for before giving the guarantee they make much more careful enquiry about him than any individual employer is able to do. They have complete sources of information as to the person whom it is proposed to guarantee, and speaking generally, if a man can obtain a fidelity guarantee bond from one of the big companies transacting this class of business, then there is not much danger about giving him employment. It is satisfactory to feel that every man in the service is honest and trustworthy. Things are improved, but in the first year or two after the war the habit contracted of "scrounging" or "winning" whatever a man happened to want, completely upset the morality of a great many men who, before the war, would rather have cut off their right hands than even contemplate anything of the kind. When war comes in, morality goes out, and necessity takes its place. The old condition of affairs is practically restored, but the value of the fidelity guarantee still remains.



A Bradford Shuttle Factory

In many cases it is possible to call upon the employee to furnish a satisfactory guarantee from a leading company transacting this class of business, and that action saves a great deal of trouble.

CHAPTER V

## THIRD PARTY INSURANCE

WHILST it is necessary to consider carefully what risks the small man opening a business can afford to insure against, it is equally necessary to consider what risks he should insure against, even if it means some small sacrifice. One of the most important of these, and perhaps the least expensive in proportion to the benefit received, is insurance against accident to third parties which might involve costs of litigation and even ruin in some cases to the small tradesman.

### Risks.

Outside his shop there are such possibilities as the fall of a signboard, either overhanging the pavement, or nailed to the wall, or displayed on the roof. Such accidents are quite common in a high wind, or if any of the fastenings crack through a flaw in the casting or from rusting. If there are cellar flaps, forming when closed part of the ordinary footway, there is quite a serious risk that some careless person will not securely fasten them after taking in goods or handing out empties. Numbers of accidents happen in this way and very serious claims have to be met. In fact, there is no limit to the extent to which third party claims can go. Obviously if such an accident were to throw out of work for two or three months a man who when at work earned £5,000 a year, the compensation for damage to him would amount to a great deal more than the compensation for damage to an errand boy, earning perhaps 15s. a week. The measure of the damage is the measure of the loss to the injured person, and it would be a hard and even cruel thing if the small man's business were destroyed and his capital absorbed in paying a claim of this kind. However, hardly a week passes in the law courts up and down the country in which two or three such claims do not occupy the attention of the judge.

Another form of claim is in the case where there is on the footpath, one of those flat windows with prism lights which admits light to the basement and reflects it into the room. They are usually laid in a cast-iron frame, and with the constant use by foot passengers overhead, they become worn down and very slippery. If a foot passenger slips and injures himself and can say that it was due to the frame being worn down, or the glass lights being worn down, which is equally common, they can certainly claim to obtain damages from the shopkeeper.

There was a case where a woman under singular circumstances recovered £600 and costs from an old gentleman of 90. The claimant's sister was the old man's housekeeper and she used to visit her sister from time to time. On one occasion, her brother and sister went to visit the sister. Having climbed the steps to the front door they stood on the stone slab and rang the bell, when the slab gave way and both brother and sister fell into the cellar. The brother was not much hurt, but the claimant had concussion of the brain, an injured arm, a fracture of both legs and an injury to the spine. The defence was that the plaintiff had no leave to be on the premises and that there was no negligence; still, the old gentleman had to pay £600 and costs.

Very often there are area steps down which goods are received, and if those steps are out of repair and a man, carrying a parcel of goods to the receiving lift, slips down those steps, he is almost certainly entitled to compensation if the accident happened through the step being worn down or otherwise deficient.

It must never be forgotten that if the accident is caused by the negligence of the servants of the employer engaged on the employer's business, the employer is liable; thus a boy riding round on a bicycle delivering goods to customers—one of the greatest dangers to be found on the road—may knock down an old lady, or even her pug dog. A law suit may easily arise, to which the only defence is "contributory negligence," which means in such a case that the old lady walked under the bicycle without looking where she was going and gave the poor innocent boy no chance of avoiding her, or else that the road is not intended for the use of pug dogs, who are usually stupid and prefer, it would appear, to crawl under wheels and get killed, rather than keep out of the way.

Every tradesman has to expect claims of this kind. As he mounts in the world and is able to employ small motor delivery vans, the risk increases. The juries in the county courts, where such cases are usually heard, are generally very prejudiced against motors of any kind. Their existence insults the natural instincts of the conservative Briton, so that when he gets a chance to take it out of the owner of one of these detested vehicles, he makes no mistake about showing his opinion on the subject and awards heavy damages.

### Going to Law.

It is a matter of common prudence to insure against anything of this kind happening. The insured man need only give notice to his insurance company for them to take up the whole responsibility of the costs of litigation, should any ensue. That alone would be worth the money paid as premium, for there is an intolerable anxiety about going to law. The result of law proceedings is an absolute lottery. No one can say for certain that he is bound to win a lawsuit, especially if it

be tried by a jury. The jury in its anxiety to do justice is usually in half-mind during the trial. There are certain barristers who can pretty well do what they like with the jury. In any case it is very difficult for the juryman to keep in his untrained mind all the salient points of the evidence to which he has been listening.

Suppose the verdict goes against the tradesman and he is advised to take the case to the Court of Appeal; whatever happens he has to bear the strain of the anxiety and the very considerable costs over and above those he will extract from his adversary, even if he wins the appeal. On the other hand, if the man is insured, the officials of the insurance company who will handle the case, will go home and sleep at night, for even if they lose the case, the loss will not come out of their pockets. When an insurance company is engaged in a lawsuit, their whole desire and object is to settle it out of court by negotiation with the other side. Tens of thousands of such claims as this are paid by the insurance companies every year which never go into court at all. There is no comparing the skill of the professional who deals with an enormous number of cases of this kind and who has the law at his fingers' end, with the efforts made by the amateur who has had, say, one such case in two or three years, assisted by the local lawyer, whose experience is relatively limited.

## A Necessary Expense.

There is no doubt, therefore, that the expense of this particular insurance must be incurred by the small man if he wants to keep a quiet mind.

It is, perhaps, fortunate that the British are not an imaginative people and do not believe that accidents will happen until they see them. Nor do they take much notice of accidents to other people, even in the same trade, because their greatest gift is minding their own business. Nevertheless it is wise for them to picture such a thing happening to themselves, if only for the sake of avoiding the annoyance and anxiety it will cause.

## Special Third Party Risks.

There are naturally certain trades where special risks to a third party are incurred. The butcher, for instance, may sell bad meat to a customer and ptomaine poisoning may follow. Certainly someone is liable for that, and most likely the retailer, unless he can pass it on to the man who sold it to him, just as the milkman does in the case of watered milk, which he invariably says he has sold in the same condition as that in which he received it.

A man opens a small eating-house and is liable to a claim if anyone who has eaten his food develops the same trouble. Such things happen even in the best and biggest restaurants. Almost invariably the claim is settled out of court, because the proprietor does not wish to see any hint of reflection on the character of his restaurant. This all costs money, whilst a couple of pounds per annum might avoid the risk entirely, by throwing it on the shoulders of an insurance company. A claim of £500 might easily arise which would probably have to be paid down on the nail by the person concerned, if he has not taken the trouble to insure.

Suppose, again, he employs a horse and cart for delivery, or, as his business grows, two or three horses and carts. Every time one of those carts goes out there is the risk of damage to the horse or to the cart or damage to third parties, either by collision, usually the result of careless driving or by some part of the vehicle failing, as for instance a wheel giving way. There, again, the risk should be covered by insurance. To put it shortly, business people have no right to burden themselves with these responsibilities which are entirely outside the nature of their business on which their mind should be concentrated.

## Stolen Motor Vans.

Suppose, instead of horses and carts, they are using motor vans for delivery, there is the added risk, so common now, that the van and its contents may be stolen whilst the man is chatting at the back door with the pretty servant maid, or having his midday meal in an eating-house with the van standing at the pavement outside. That is a risk which certainly ought to be insured against. Such a van and its contents may easily be worth from £300 and upwards, and a loss of that sort is serious at any time, but especially in the early days. It is just one of those things which the owner himself cannot prevent. When a van is stolen, the first thing the thief does is to drive it at least two or three hundred miles away from where it was stolen and sell it in the place he has driven it to.

There was the famous case which came into the daylight where a gang of motor-car thieves had a complete organization in London and in Newcastle, and a depot of their own in each town where they sold second-hand cars. The man who stole a car in London drove it to Newcastle, removed the London plates, repainted the car and made it a real good second-hand article, whilst the man who stole a car in Newcastle drove it to London and put it through the same process. It was quite a long time before an accident put the police on the track, so that, as is well known, the chance of recovering stolen cars or vans is very small indeed.

In short, it would be well to consult either a trustworthy insurance agent or broker or the

direct representative of a sound and well-established insurance company, and thrash out the cost of providing against all these risks, or if at first that costs too much money, then to cover those which are the most serious, and the first of these is where there is risk of damage to third parties in or about the business premises, because it is just there that the accidents are most numerous and the damages heaviest.

or two before insuring his life, but he cannot afford to carry the risk of death by accident, or a long confinement to his room, or in the hospital in the event of a serious accident befalling him. Deprived of the eye of the master, business—and especially new business—is apt to become disorganized. The customers he has already secured by hard work and personal attention, will very quickly go elsewhere if they discover any slackness

*By permission* *Messrs. Saml. Haskins & Bros., Ltd.*

An Attractive Frontage in Bronze Metal

CHAPTER VI

## ACCIDENT, SICKNESS, AND CASUALTY INSURANCE

It may be that at the beginning of his business career, the young man does not see his way to commence insuring his life at once. In that case he certainly should insure under an accident policy with a good office, because if he is in good health he may venture to risk waiting for a year

or check in the conduct of the business. Competition is very keen, and trade rivals, who may have resented the new-comer, take advantage of any complaint that they may hear of to cut in and try to secure his business. Although the injured man may be well enough to attend to the purchasing for his business, he cannot exert much control over the selling end. If he be married, the wife may help a little, but probably her time would be greatly occupied in nursing and looking after him; therefore it is almost necessary for

him to hire a capable and experienced substitute to act during his illness, and the money received from the insurance company will go some way towards providing for that. So much for an accident.

If a man sits down to work out all these possibilities, he will see that the modest sum which secures him an accident policy of sufficient amount for a beginner is money well spent. Some men to-day are inclined to drop their accident insurance, which would cost them perhaps £4 a year, and rely upon newspaper coupon insurance which costs the newspaper 1s. per head per annum and provides exactly 1s. per annum value of protection. Thanks to the close analysis of this system, which has been made by various newspapers who do not transact the business, it is absolutely clear that it is full of pitfalls, and that anyone who relies on the coupon insurance alone is going to be badly disappointed. To be safe, a man must have an accident policy.

## Distinction Between Partial and Total Disablement.

There is, however, one point to consider. With any accident policy a distinction is made between total and partial disablement. There has never been an exact definition of what is total disablement, because in most bodily illnesses or accidents there comes a point, when a man even from his bedroom, is able to attend to a certain amount of business, and therefore it is well that the policy should include some provision for partial disablement. An accident policy costing £4 a year—say, 3d. a day—will give the person assured, or his representatives, £1,000 cash in the event of death by accident of any kind, or blindness or loss of two limbs, or loss of one eye and one limb, caused by any kind of accident, or £500 on the loss of an eye or limb, or £6 weekly for total disablement up to 52 weeks, or £1 10s. a week for partial disablement. Further, an addition of 10 per cent, say, 8s. a year, or less than 2d. a week, will pay the medical charges up to £20 where the claim is £120, and so on. Let the man understand what his feelings would be if he slipped and broke a leg, and had not saved this trifling eighteenpence a week to insure proper treatment and freedom from anxiety during recovery and convalescence.

In recent years it has been found possible to add to accident insurance a system of compensation against certain specified diseases; such, for instance, as appendicitis, cancer, carbuncle, diabetes, diphtheria, hydrophobia, measles, kidney inflammation, inflammation of the middle ear, peritonitis, acute pleurisy or pneumonia, pyaemia, small pox, scarlet fever, sunstroke, typhoid, typhus, and very many others.

## Compensation Payable.

Owing to the doubt as to when a man is totally, and when partially, disabled it is usual for the exact compensation for an accident to be fixed by negotiation. The injured person's doctor can easily fix the length of the period which the injured person has been quite unable to give to his business, and there can be no doubt as to the compensation payable in respect of that. For the rest of the time, during which the assured can attend to some business, until the day on which he is able to go about his work as before the accident, there would seem to be grades of disability, and as a rule the insurance companies, particularly those of high standing and large funds, favour liberal interpretation of the word "partial." In the long experience of the writer, he has seldom heard of dissatisfaction with these settlements, although on innumerable occasions he has received letters of thanks from the insured persons for the liberality of the settlement; and the expression of satisfaction felt by the injured person in the very fact that he was provident enough to insure against what had happened. Business men, and tradesmen especially, cannot wisely avoid taking an accident policy.

## Hazardous Trades.

It must be remembered that in businesses there are various grades of hazard; for instance, a draper is exposed to less risk than a grocer, and a grocer to less risk than a butcher because, in the butcher's case, a slight cut may very easily produce blood poisoning with very serious results. The butcher, again, is a less hazardous risk than the ordinary publican, although in these days there is springing up a new class of men licensed to sell intoxicants, who are as steady as most other members of the community. But it is a known fact that the publican is apt to yield to the temptation of taking too much to drink, especially at the hands of customers who insist on treating him, and it is absolutely certain that an alcoholic subject makes a bad recovery from wounds of any kind or from sickness of any kind, especially influenza or pneumonia, or any other disease which acts by poisoning the blood. Naturally, therefore, the nominal premium which we have quoted above is increased when the occupation is what is called "hazardous."

## Sickness Insurance.

Statistical information, which has been gathered over the experience of many years, now enables an insurance policy to be issued to provide specified compensation in the event of any illness whatever. The cost is considerable, and therefore the taking out of a policy may be postponed until business begins to flourish. When that time comes, it is wise for everyone to examine the question.

The ordinary man is supposed to average about fourteen days in the year during which he is unfit to work through colds, or various small cases of ailment; of course, that does not mean that he gets fourteen days' illness every year but, spread over a term of years, the average will work out at about fourteen days, and if his premium gives him nothing for several years, the time is sure to come when compensation for sickness will have to be paid and use up a considerable portion of the premiums he has paid for this purpose.

The premiums are necessarily rather high, because the risk is of common occurrence. The policy itself may be framed on compensation to the sufferer from any one of a long list of detailed illnesses, including all those most common to humanity, or to secure compensation against any illness whatever. In the second case there has to be a medical examination to find out if the applicant for insurance is at the time of asking an ordinary standard life. No company could take a risk under this head on any but a healthy man or woman. The premium in the case of a woman is higher than in the case of a man. National health insurance has not done much good to anybody, but it has made clear the extra sickness endured by women and the longer time recovery takes.

## CHAPTER VII

## SUNDRY INSURANCES

In this chapter the insurance of plate glass, boilers and machinery will receive our attention.

### Plate Glass Insurance.

The man opening business must certainly insure his plate glass against breakage. Plate glass is expensive, particularly in some of its more recent developments. We see the entrances to the big shops made up almost entirely of elaborate curved plates of enormous size and great cost. A really big business like Selfridge's or Harrods' can afford to be its own insurer in regard to the risk of breakage of its plate glass, but it would be very inconvenient for a small man to find the necessary £30 or £40 to replace his. The insurance is relatively cheap and the cost is calculated on the size of each piece.

When it is desired to insure plate glass a measurer is sent down by the insurance office, who measures up each piece of the glass and quotes a rate in accordance with tables which have been supplied by the insurance company. These rates take into account various shapes and qualities of the glass. For instance, a bent plate to go round a corner costs much more to replace than a plain plate of the same size and quality. Glass of facias, which is usually decorative and expensive, costs more than glass in the windows. All this will be carefully explained by the company's measurer.

If a breakage occurs, notice must at once be given to the company, and as soon as received they set to work to repair the broken glass. Compensation is not paid in cash. The company's obligation is to make good the breakages.

### Boiler and Machinery Insurance.

In cases where boilers are used in trade, either to generate steam or for any other purpose, it is very desirable to have them insured. There is a risk of explosion, a risk of breakdown of the machinery and a risk of consequential loss. There is also a risk of collapse of the flues and a risk of the Board of Trade intervening and punishing the owner of the boilers in the event of an explosion due to neglect.

### Board of Trade Enquiries.

By the Boiler Explosion Acts, 1883 and 1890, the Board of Trade is empowered to make preliminary enquiries and to appoint commissioners, acting as a Court of Summary Jurisdiction, to hold formal investigations of the causes of all boiler explosions and to inflict penalties upon any persons held by them to be responsible.

Over 2,500 of these enquiries have been held and fines varying from a few pounds to over £500 have been imposed. The enquiries have greatly increased in stringency of late.

### What is a Boiler?

If we want to know what is a boiler within the meaning of the Act the answer is—

> Any closed vessel used for generating steam, or for heating water, or for heating other liquids, or into which steam is admitted for heating, steaming, boiling, or other similar purposes.

This includes such vessels as economizers, superheaters, steam pipes, steam-jacketed pans, hot-water circulating boilers, such as are used in many businesses and private houses. A great many people, for instance, have hot-water circulating boilers in their private houses, and kitchen boiler explosions are common.

### Inspection.

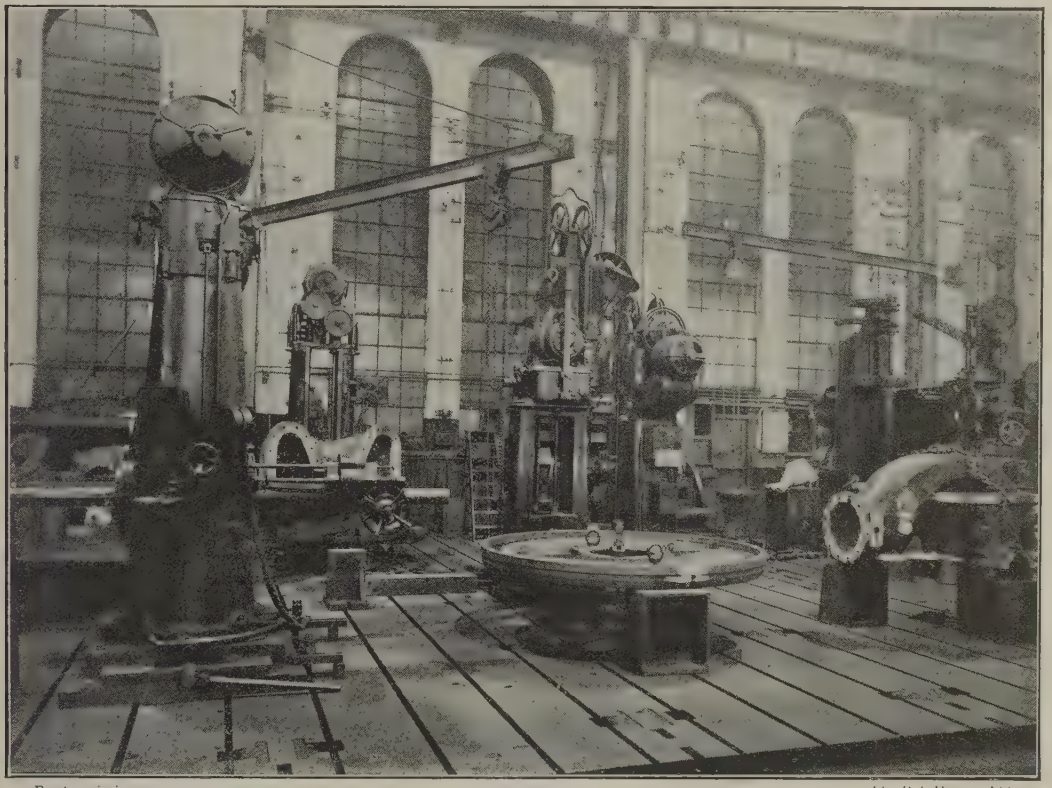
There is a provision in the Factory and Workshop Act, 1901, that steam boilers must be examined thoroughly at intervals not exceeding fourteen months by a competent person, and the Act makes the user of the boiler responsible for the competence of the person he employs as an inspector.

Now in the case of the various insurance companies who insure compensation in the event of accidents to boilers, engineer-surveyors are employed. These men have to be accepted as competent by the Home Office, the Board of

Trade and the various local authorities concerned. As the insurance company has to pay if anything happens to the boilers, they take care to have competent inspectors. There are periodical inspections, followed by reports to the owner as to the condition of the boiler, made in accordance with the requirements of the Home Office and the Board of Trade.

gauges can be tested while boilers are at rest or under steam, and each takes with him a patent portable test pump for hydraulic tests.

Some companies even have laboratories to advise on the analysis of feed waters, on fuel and on the gases which escape through the flue, in short, on all questions affecting the economy and efficiency of power producing plant.



*By permission* *The B.I.H. Co., Ltd.*

A Machine Shop

Lighted by Madza gasfilled lamps in Mazdalux reflectors

## Risks Covered.

Hydraulic tests, where necessary, are made at suitable intervals and the insurance company lends pumps for such tests free of charge. The insurance itself covers the following risks arising from explosion or collapse of flue or furnace—

1. Damage to the boiler;
2. Damage to the surrounding property of whatever kind; and
3. Injury to persons, employees or others.

## Testing, Etc.

Each engineer-surveyor is provided with a patent pressure gauge tester, by means of which

In some companies as many as 100,000 boilers, engines, electrical machines and lifts are under supervision. One would think that the money received in premiums would be all employed in compensation for damage done. In point of fact, most of it is used in seeing that accidents do not happen at all, which is a much safer and much more useful plan. Nobody wants an accident and if, in consideration of a premium, inspection can be given which will avoid accidents, all the better.

## Cranes.

The small business man may not require insurance in the event of accidents caused by

lifts, hoists, elevators or cranes, but it often happens that he employs a kind of long arm in the nature of a crane to hoist goods from the street to an upper floor of his warehouse. All sorts of accidents may arise if anything goes wrong with these small lifts or cranes, and it is not by any means expensive to insure against this risk. The premiums are fixed after inspection and on ascertaining the nature of the risk.

## Inspection of Lifts, Etc.

Boiler accidents, thanks to inspection, are now extremely rare, but unfortunately lift accidents are very frequent with both goods and passenger lifts. The insurance companies offer free inspection, at quarterly intervals, of the lifts, ropes, gearing and mechanical equipment. They make good any breakdown and they deal with all claims for personal injury received by any person or persons not in the employ of the insured, while entering upon or alighting from the lift, or in the lift well, for which the insured may be liable.

If the lift machinery is driven by electricity, they undertake to inspect quarterly all the electrical equipment and make good any breakdown in the motor. In fact, in any case where the insurer decides to be covered against breakdown or personal injury, the inspection of the lift has to be included.

The electrical engineer of the insurance company undertakes to explain to the attendant in charge the various points of detail in connection with the care of the plant upon whose efficiency so much depends, to teach him how to adjust the brushes, tighten up loose nuts and bolts, to take the machinery apart for cleaning purposes, and generally to do anything which can be done in an hour or two by a trained electrician without using special tools or new material.

The value of such inspection made by disinterested parties like the insurance companies, is very great—disinterested we mean as between the maker and the owner.

## Breakdown of Machinery.

As a man's business extends and he brings more machinery into it, the question of a breakdown in his machinery becomes of great importance. Such a breakdown costs a good deal for repair and consequential loss is by no means an insignificant part of the loss resulting from the breakdown. All this can easily be handled by the insurance company, but the fundamental basis of the protection they offer is the quarterly inspection, so that any weakness may be detected in good time.

The insurance company's engineer-surveyor reports on the condition after examination and test of crank-shaft journals and driving-wheel teeth, on adjustment of valves to equalize distribution of steam, so as to obtain uniform turning and improved economy by proper working, and on many other points.

When a claim arises under a breakdown clause in the policy, it is usually a heavy one. Consider the damage which may be done if an accident happens even to a small fly-wheel, such as we see in a grocer's shop, running the coffee-grinding machine.

## Gas and Oil Engines.

Many tradesmen install a small gas or oil engine to do work about their business premises. Both gas and oil engines possess characteristics which render working conditions extremely severe and result in heavy stresses on all the working parts. The high temperatures and pressures generated in the cylinders during explosions of gas or oil vapour charges, explosion shocks on the moving parts, rapid wear of bearings and deflection of crank-shafts, heavily-built fly-wheels, and so forth, can all contribute to a sudden smash.

The insurance company makes thorough, practical and regular examinations of the working parts of the engine, makes "indications" of the engines if they are fitted with the necessary gear to make such "indications," and in every case makes a report to the owner after each visit of the inspector, showing the condition of the machines and saying what is necessary to be done to them. More than that, they advise on the consumption of gas or oil, on the adjustment of valves and the proper working of the mechanism, so that many small people who could not possibly afford to employ engineers themselves gain great benefit from an insurance company's skilled expert.

It is possible in nearly all these cases to add to the insurance protection against consequential loss caused by explosion. Consequential loss has already been defined in the chapter on "Fire Insurance."

CHAPTER VIII

# UNEMPLOYMENT AND HEALTH INSURANCE

ANY employer of labour is bound under an Act of Parliament, passed in August, 1920, and subsequently amended by further Acts of Parliament, to see that persons who come within the following definitions of employment should be insured—

(*a*) Employment in the United Kingdom under any contract of service or apprenticeship, written or oral, whether expressed or implied, and whether the employed person is paid by the employer or some other person, and whether under one or more employers, and whether paid by time or by the piece, or partly by time and partly by the piece, or otherwise, or, except in the case of a contract of apprenticeship, without any money payment.

(*b*) Employment under such a contract as aforesaid as master or a member of the crew of any ship registered in the United Kingdom, or of any other British ship or vessel

of which the owner, or, if there is more than one owner, the managing owner or manager, resides or has his principal place of business in the United Kingdom.

(*c*) Employment under any local or other public authority, other than any such employment as may be excluded by a special order.

Every person who is insured under the Act (if his employer fulfils the conditions of the Act) is entitled to receive, when out of work, unemployment benefit weekly or at other prescribed intervals as authorized by Section 2 of the Act. If the employee can prove that he is in receipt of any pension or income to the annual value of £26 or upwards, or is ordinarily dependent for his livelihood upon some other person, or is ordinarily dependent for his livelihood on earnings derived from an occupation which does not come within the meaning of the Act, he shall be entitled to a certificate exempting him from liability to insurance.

## Contribution.

Originally the contribution which the employer had to pay was 4d. a week in the case of men and 3½d. a week in the case of women, but the further Act passed on 12th April, 1922, increased these contributions to 10d. a week for men and 8d. a week for women. As 10d. a week amounts to £2 3s. 4d. a year, the unemployment insurance tax is a heavy burden to the small man, especially in keenly competitive trades.

Over and above these sums, the employed man over 18 has to pay 9d, a week and the employed woman over 18, 7d. a week. To this contribution the taxpayer adds 6¾d. a week for each man and 5¼d. a week for each woman. All this money put together was not sufficient at the end of 1922 to pay out benefits to the unemployed people, and had to be supplemented by further grants from Parliament.

The card system applies in the same way as in National Health Insurance, and the employer is held bound to keep these cards or books duly stamped and up to date.

## Benefits.

Originally, in 1920, the benefits were conditioned by requiring the payment of at least twelve contributions before being in a position to claim. When application for benefit was made in the approved and prescribed manner, and it was found that the man was able to, and wanted work, the man got benefit and, if he had exhausted the 26 weeks' benefit provided by the Act, before seeking for more, he should, if required, attend for a course of instruction in other work. Of course, unemployment through trade disputes was barred from benefit, but the payment of benefits can scarcely be said to concern the employer. When a man or woman claims benefit under the Act, he or she has to fight it out with the Ministry which, in other words, means the clerk at the labour exchange. Those troubles need not concern us in these notes.

## Government Inspector's Rights.

There is a point of importance to mention. A Government inspector has the right to enter any premises other than those of a private dwelling-house not being a workshop, where he has grounds for supposing that any employed persons are employed and to make enquiries among the employed people to see that their cards are stamped, and indeed to question them upon almost any matter he chooses in regard to their private lives, or anything else he likes. The employer has to give the inspector any information he likes to ask and to produce for inspection his registers, books, cards, wages sheets and records of wages, and other documents that the inspector may reasonably require, and if he obstructs the inspector or attempts to conceal any of the information, or to prevent any persons from appearing before the inspector, he is liable to a fine not exceeding £5. He has, however, the consolation of knowing that he need not answer any question tending to incriminate himself.

## The Employer's Liability.

There is also a provision in the Act that if an employer has failed or neglected to pay any contribution, or has failed to comply with the requirements of any regulations, and by reason thereof the person employed by him, and now out of work, has lost the whole or part of the unemployment benefit to which he would have been entitled under this Act, the man or woman shall be entitled to recover summarily from the employer a sum equal to the unemployment benefit so lost. This penalty applies even if the employer has been fined or imprisoned for neglect to comply with the Act.

Unemployment insurance stamps may be obtained at any Post Office.

## The 1922 Act.

The Act of 1922 repealed an Act that was passed in 1921 and increased the rates of contribution to the figures now stated. The main change is that if the employed man is living with his wife, or any female person as his wife or, if the beneficiary is a woman with a husband dependent upon her, the benefits are in excess of those authorized by the Acts of 1920 and 1921, for the amount of weekly benefit should be increased by a sum of 5s. If the person has dependent children, the weekly rate of benefit should be added to by 1s. for each child.

Put into plain English all these Acts mean, as far as an employer is concerned, that he is in jeopardy if he does not see that the payments

required under the Act are made and that he keeps his books and premises open to Government inspection when demanded.

All the other provisions refer to the relations between the Ministry and the employee and the rights of the employee.

### The "Dole."

It is perhaps unfortunate that the unemployment allowances should be termed the "dole," because in point of fact they are paid as to the larger part, out of the moneys provided by the employed people and their employers, and there is a right to claim allowance in respect of the contributions paid.

There may be further Acts of Parliament dealing with these questions, after this volume is published. Employers, large and small, should be on their guard to see that any requirements of such new Acts of Parliament are fulfilled by them. It is not for them to resent the policy of Parliament, save as electors voting against it at elections. It is the general opinion that, serious as the position of the country was in 1922, owing to the dearth of employment, it would have been infinitely worse in the great cities of the North, had it not been for the unemployment benefits and the supplementary grants from the rates.

### National Health Insurance.

There is also an obligation on the part of employers, small or large, to contribute themselves and see that their employees—with certain exceptions—contribute to the National Health Insurance scheme. In this case the cards of male employees have at present to bear a stamp equal to 10d. per week and the women 9d. a week, of which the employer contributes 5d. and 4d. respectively. The employer has to see that the stamps are impressed on the cards. This weekly premium may be increased at any moment by further legislation.

There is also an obligation to allow a Government inspector to enter any premises where business is carried on, and to examine all books and all employees to see that the Act is complied with. Here, again, it is not necessary to go into the political aspect of the case or the enormous expense at which the Act is worked. The law has been made and must be observed.

### Domestic Servants.

One thing worth noting is that domestic servants come within the National Health Insurance scheme but not within the unemployment scheme. As in the case of the Unemployment Act, the larger proportion of the provisions are framed to regulate the arrangements where the employed contributor comes within the relief provisions, and do not concern the employer.

## CHAPTER IX

## CLAIMS SETTLEMENTS

The proper settlement of claims is a matter of importance both to the person insured and to the company which insures him. A claim is never pleasant. It involves a certain amount of negotiation between the claimant and the company, represented by their "Claims" Assessor. Both sides are bound to struggle to arrive at a satisfactory settlement. It does not pay an insurance company to press too hard for its full rights if the claim is an honest one. Nor does it pay the insurer to press for more than that to which he is legitimately entitled by reason of his loss.

In the case of complete destruction by fire, money values have to be examined; settlement, of course, is greatly assisted if the insured keeps a stock-book in which his transactions are recorded or, if the fire takes place at a private house, there happens to be an inventory and valuation of the whole of the furniture in it. Without such a stock-book or inventory, it is almost impossible for the insured person to make out a proper claim. In any case it is a very laborious task to build up from memory, a list of articles destroyed, and if it is quite impossible, then common sense has to come into play and settlement be made by mutual agreement.

### Notice to Insurance Company.

The first thing to do when a claim arises under any kind of policy is to give the promptest possible notice to the insurance company. They will immediately send down forms to be filled up, detailing the nature of the claim and of the cause, or supposed cause. In case of fire they are generally assisted by the report of the fire brigade and the salvage corps, but that assistance does not help the insured in making out his claim. If he has placed his business through an agent who understands what insurance is, he will be greatly helped by that agent.

It is known that the thousands of settlements made in a year are made practically without any litigation at all, as the companies and the insurers come to an amicable agreement when the assessors get together.

In case of a claim under a personal accident policy, it is most important to give quick notice so that a medical representative of the company may be in touch from the commencement of the case, with the amount of injury suffered, if the company think it is necessary. But usually such settlements are made on the certificate of the doctor attending the case, and a medical representative of the company is not required. The only difficulty is to determine the line where total disablement ends and partial disablement begins, and that is a question of discussion between the company and the doctors, but everyone must

remember that the companies are not there to be shot at by claimants pressing for an unduly large compensation, and certainly not by malingerers. Unhappily, it is found that there is an undue amount of malingering to be dealt with in these cases. The natural thing would be to suppose that a business man suffering from an accident would like to get well and back to work as quickly as possible, but that is by no means always the case, especially if trade is a bit slack. Still, considering all the difficulties, the case where an

## Malingering.

There is a great deal of malingering in workmen's compensation. If an injured man can draw half his weekly wages and a good allowance from his club or friendly society at the same time, the effect of his going back to work would appear to be that he is working for the small sum representing the difference between his wages and the compensation money plus the friendly society money. Under such circumstances it is only natural that he should be in no hurry to get back to work.

*Photo* *Kealeys, Ltd.*

PORTION OF GENERAL OFFICE
(Messrs. W. H. Hayden & Co. Ltd.)

insured person has to sue the company or arbitrate for a proper settlement of his accident claim, is very rare.

In workmen's compensation cases, the insured should at once make a report to his company because, although he is not interested in the settlement, save in so far as he wishes to keep a good name with his employees (if he is insured in the right kind of company that trouble will not arise), it is his interest to inform them of the accident as soon as he hears of it. The company then has a better chance of gauging the serious or trivial nature of the case if its representative can see the injured person straightaway.

It may be, and constantly is, the fact, that the half-weekly wage has to be paid for the rest of the man's life. If that be so, the usual practice of the companies is to offer a substantial lump sum in full settlement. It is quite extraordinary how many cases occur where, when a permanently disabled man has received his lump sum settlement, he finds himself capable of doing light work of some sort.

Human nature accounts for a great deal in all these matters and the motives actuating men and women are pretty much the same whether those concerned be rich or poor. There is an undoubted duty on the part of the insured person

or firm, to take the side of the companies in all these cases. The company has put itself into their place, but it happens too frequently that a firm, for motives best known to itself, takes the part of the injured man in the discussions which arise. It is not necessary to do that, for the trade union to which the injured man belongs, is quite capable of looking after his interests.

## Burglary.

All the remarks applied heretofore to the general principles of notifying claims, apply with increased force to a claim under a burglary policy. The company should be notified at the very moment the police are called in.

Here it is worth noting that it is usually a condition of the policy that the police should be called in at once. There are cases, for example, of larceny, either of goods or of money from the place of business, where the employer desires to pardon the thief and say no more about it. In such a case he cannot expect the insurance company to compensate him for his loss. One of the most complete deterrents to this kind of crime is that the employees believe that they are up against an impersonal insurance company rather than a kind-hearted employer.

There is another reason why the police should be called in at once. The police report gives exact details as to how the burglary was effected, and if they come at once they can begin their enquiries right away. To call in the police two or three days after the theft has been discovered is to prevent almost any chance of the thieves being traced, indeed in some cases, such neglect would give rise to the belief that there were suspicious circumstances attached to a claim.

## Claim Under Guarantee Policy.

Analogous to the case of larceny by an employee is the claim to be made under a guarantee policy, if one exists. The guarantee company must be notified as soon as embezzlement is discovered, and it is for them to settle what course of action to adopt in regard to the criminal. If they decide to prosecute, then the insured person is bound to furnish them with all the necessary proofs of guilt, and to supply all such evidence as is in his possession which may tend to prove the guilt of the accused.

A guarantee company does not always prosecute in these cases. Frequently its interference leads to the restoration of the missing money.

## Other Claims.

A claim under sickness insurance should be notified by the doctor attending the case, when proper forms will be sent upon which a claim may be based. Here, again, the only difficulty is where to mark the line between total and partial disablement, and it is usually left to the doctors to come to an agreement on that point.

Where a person is insured under a policy to cover third party risk, immediate notification of accidents is of the first importance. Evidence of witnesses of the accident may be most essential and it may not be easy to trace them if there has been any delay.

The question to be decided in most of these cases is, who is really to blame—the insured, his employee or the injured person? In cases of collision of vehicles, it is quite essential to get a settlement quickly, and naturally the insured should be ready and willing to help the company which is taking his burden on its shoulders.

To put it bluntly, an insurance company is easy to deal with if the claimant assists it with all his power to carry out its obligations under the policy. But it can be very awkward if there is obvious reluctance to state the full facts on which a claim is based. There is a saying which may be endorsed here, that it is wise to tell your bank manager everything. Apply the rule to your insurance company and no trouble is likely to arise.

SECTION 14

# Some Practical Suggestions for the Shop, Office and Warehouse

By Ernest Rigby

## CHAPTER I

## PUNCTUALITY IN BUSINESS

Bad time-keeping on the part of employees will clog the wheels of business by preventing the early morning start which is so necessary in most businesses if satisfactory results are to be attained.

Where slackness is permitted in allowing assistants to enter the shop or warehouse even a few minutes after the fixed time for commencing, there is gradually brought about a lack of discipline which cannot but have harmful effects.

The assistants being interdependent, as is often the case, the absence of one of them will sometimes mean that others will be held up from commencing their duties until the delinquent arrives.

With some assistants it is seemingly impossible for them to arrive in time. If the commencing hour is 8.30 am., they will arrive at 8.35 or 8.40 a.m.; if 9 a.m., 9.5 a.m. or later.

### The Time-keeper.

A good plan is to appoint as time-keeper one of the assistants, who would each morning record the late comers. Should the commencing time be 8.30 a.m., the door at which the employees entered would be closed at, say, 8.32 for 1 minute, and all assistants entering the building later would sign in a book provided for this purpose. The time-keeper would get out at fixed periods—say, the end of each month—a record of "lates" under each section, office, packing room, etc., and the complete report would be placed before the management. The writer does not consider that preferential treatment should be accorded to any employee, no matter how good a workman, salesman, or clerk he may be. An assistant, if allowed to arrive a few minutes late without being treated on exactly the same lines as other employees who may not be so efficient, will be greatly tempted to take advantage of such leniency, thus causing dissatisfaction amongst the staff generally. Some business houses make a point of allowing a certain number of "lates" during a two or three months' period, and should this number be exceeded by an assistant, he is warned that a second "offence" will mean dismissal, and if repeated during the next period he is discharged.

The controlling head of a business house which allows slackness to prevail as regards time-keeping may be responsible for losing a considerable sum during a twelve months' period.

### Heads of Departments.

Some houses allow their heads of departments considerable latitude in a morning, and do not insist upon their keeping to the time fixed for the general assistants.

Should the commencing time be 8.30 a.m., the buyer or head of a department is allowed to come down at 9 o'clock, or perhaps later. This is a mistake, as, unless there is a controlling hand in a department from the moment work is started in a morning, there is almost bound to be a slackness amongst the assistants. For instance, the credit manager must be down promptly to deal with the passing of the morning orders, and so enable a start to be made. Not until there is a controlling hand in every department in a house from the time work commences, will the best results be attained.

### Time-Recording System.

The most satisfactory method of time-keeping is the system, adopted by many traders, of using an automatic time recorder, of which there are many makes on the market. The records taken are accurate, and an assistant is unable to question the time, as is sometimes the case if one has a man to take down employees' time as they arrive. The automatic time recorder is most suitable for all traders having a number of assistants. Especially is one essential for the workroom, factory, etc., where wages are often paid on the time-work system.

Each assistant is furnished with a card which shows the time of his arrival and the time he leaves the house. The card, as shown on p. 286 is spaced to record arrival and time of leaving at night.

Assistants' time cards are numbered and are kept in an open cabinet, which is numbered from top to bottom in numerical order. For example, John Jones (Card No. 43), on arriving in the morning, goes to the cabinet and picks out his card from No. 43 section, and places it in the slot at the foot of the clock face, when a bell rings and

the time is printed on the card. The card is then replaced by Jones in the rack under its correct number.

A book may be used to record, week by week, the employees' time, so that a reference may be made

**TIME CARD**

No. 43

Name ..... John Jones .....

Week ending ..... July 24th .....192

| Day | IN | OUT | IN | OUT | Total |
|---|---|---|---|---|---|
| A.M. F P.M. | 8 31 | | | 1.00 | 4½ |
| | 2 00 | | | 6.00 | 4 |
| A.M. S P.M. | 8 30 | | | 1.00 | 4½ |
| | | | | | |
| A.M. SUN P.M. | | | | | |
| | | | | | |
| A.M. M P.M. | 8 33 | | | 1 00 | 4½ |
| | 2 01 | | | 6 00 | 4 |
| A.M. T P.M. | 8 30 | | | 1.01 | 4½ |
| | 2 02 | | | 6 01 | 4 |
| A.M. W P.M. | 8.29 | | | 1.01 | 4½ |
| | 2 01 | | | 6 02 | 4 |
| A.M. T P.M. | 8 35 | | | 1.02 | 4½ |
| | 2.02 | | | 6.03 | 4 |

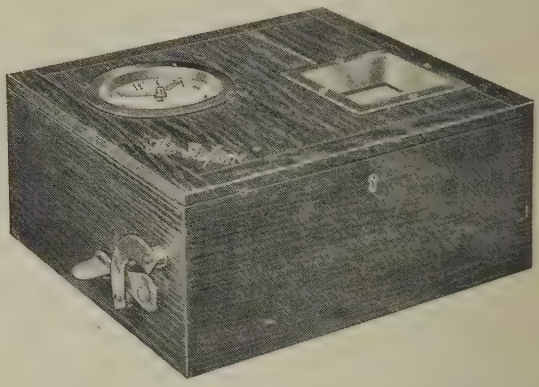
| | | | | | | |
|---|---|---|---|---|---|---|
| Ordinary Time | | | | | | |
| Overtime | | | | | | |
| Total Wages | | | | | | |
| Less Nat. Insurance | | | | | | |
| Amount Paid | | | | | | |

in order to see how many times an assistant has been late during a given period.

A compact and inexpensive form of time-recorder, the Blick "Stafsine," is illustrated in the next column. Other time-recording systems are dealt with in Chapter VIII of Section 15: "Office Machines and Appliances."

## Offer of Incentives.

Seeing that so much depends upon an early start, the writer considers it a good plan to offer some incentive to those employees who show a good record over a period of, say, twelve months. This could be worked in many ways. One is to offer, say, two days' extra at the holiday period for those assistants who have not been once late during the year. Another is to pay a bonus to those departmental assistants or that section of a house which shows the best time-keeping for a six or twelve months' period. This would have to be worked *pro rata* according to the number of assistants in each department. One may argue that such a scheme would be inclined to show weakness, but it has been found that an incentive



offered—although the actual reward may slight—has a good effect and will result in a vast improvement in the more efficient working of a firm's business.

CHAPTER II

# SECURING EFFICIENCY AND GOODWILL OF EMPLOYEES

In many business firms, suggestions for improved methods of working, etc., are not welcomed unless put forward by the principal or sectional managers. Should a junior come forward with a suggestion, he may get a hearing, but he is told that his suggestion is not suitable, and the ambitious young worker withdraws from his principal's presence without receiving a word of thanks. This sort of treatment would surely damp the ardour of the average individual, and be quite sufficient to prevent his bringing forward any idea or suggestion at any future time, even though he is convinced that his suggestion, if carried out, would result in a big saving to his firm.

Not only in the warehouse and office is there often this apparent lack of interest in employees' suggestions, but the same thing applies in the workrooms of both wholesale and retail houses.

## The "Human Side" of Business.

Why should not the employer walk through his workrooms or offices, speak to the assistants occasionally, and show a personal interest in their individual work? A well-known employer of

labour goes further than this. He desires that his workmen should work under the best possible conditions from a health standpoint, and the employees are requested to bring up before the management any matters which they feel would be beneficial to themselves. Complaints or suggestions for the alteration or improvement of any existing system may be brought forward, and such suggestions or complaints go direct before the management. Suggestions may be written out and posted in boxes placed in different parts of the building for this purpose. These suggestions are dealt with week by week, and substantial prizes are given in those cases where the suggestions are accepted. Reasonable complaints are always dealt with, and every possible effort is made to right satisfactorily any grievance brought forward. This co-operation between employer and employees has a considerable bearing on the success of the firm.

Loyalty to a firm may be looked upon as sound proof of employees receiving just and considerate treatment, and such a firm as that just noticed is in a strong position when, owing to some emergency—such as a contract which is required to be finished at short notice—a call to workers for their best efforts, so that the work may be done in the stated time, does not go unheeded.

### Suggestion Boxes.

The writer strongly emphasizes the value of the suggestion boxes previously mentioned. Every suggestion ought to be carefully considered, and the rejection of an idea should be worded or explained to the suggestor in such a manner as is not likely to dishearten him and deter him from bringing forward anything in the future.

A well-known house in Lancashire started a similar system some years ago, and in order to give employees every confidence in bringing forward suggestions without any fear of their being treated with scant attention, a committee of the firm's employees only was formed. There were appointed a chairman, vice-chairman, secretary, and a representative from every section of the house. Committee meetings were held once each month, when all the suggestions which had been received were carefully examined, and those which were considered suitable were recommended for acceptance. A list was afterwards put on the notice board, and the suggestor's name was given, with the value of the prize awarded to him. Prizes were awarded even in cases where suggestions were not put into use.

Those employees whose ideas had been rejected were informed that the firm were unable to accept their suggestions, but a proper explanation was always given showing the reason why they were considered unsuitable, and such explanation was made in a manner which left the suggestor quite satisfied. In fact, he was clearly shown that, although he had not been successful in getting his idea recommended by the committee for acceptance, it was hoped that he would try again, "with," the explainer remarked, "better success next time."

When one considers the matter carefully, it must be obvious that assistants working in office, department, or workroom, day after day, must at times notice things which they consider might be improved upon, but which may be overlooked by heads of sections who may spend only a very short time during a week in any particular department or workroom.

It does not matter how small a business may be (or, for that matter, how big), there must be some assistants who will at times have valuable ideas which might be adopted with advantage. Sometimes, although it would not be advisable to carry out a suggestion in its entirety, the idea is such a good one that a little modification may make it quite satisfactory and workable.

The main thing is to encourage and help the assistant in every possible way, and to let him see that his ideas are fully appreciated by the firm, although it is not always possible to accept his suggestions.

If a trader will take up the suggestion box idea, and run it on the lines indicated, he will find that, besides being profitable, the scheme will secure for him a larger proportion of the goodwill and loyalty of his staff.

## CHAPTER III

## THE CASHIER AND HIS DUTIES

Upon the proper control and effective supervision of an office staff depends to a not inconsiderable extent the success of any business, be it large or small. And upon the shoulders of the cashier falls a considerable responsibility.

### Responsibilities.

In big houses the cashier's duties are restricted to the counting-house only, and the matters dealt with are usually in connection with the collection of accounts, and making payments to manufacturers, etc. In a smaller concern he is often made responsible for the whole of the office section dealing with invoicing, posting customers' accounts, checking of manufacturers' invoices and statements, etc.

If the best results are to be obtained he must so appoint his staff to the numerous duties of the office that the work may be equitably divided.

### Capabilities.

Before fixing upon the duties to be allotted to an assistant it is essential that the cashier himself

be quite familiar with all the counting-house work, so that he is in a position to know the length of time required to carry out certain jobs. In fact he should be in the satisfactory position of being quite competent to take over at a moment's notice any of the work. He should know the number of accounts in each alphabetical division and the average length of time which should be taken to make out statements for each section, so that the work may be divided up to the best advantage.

at any time how any of the work stands. Clerks will take advantage of the "easy boss" by getting behind with postings, checking, etc. It is advisable to make it a rule that the cashier be at once notified in the event of work getting into arrears. During sale weeks there may be Day Book entries far in excess of the normal; consequently if some assistance is not given the postings will get behind. This would further delay the statements being sent out, seeing that a start cannot be made until entries for the last day of the month have

*Photo* *Kealeys, Ltd.*

CASHIER'S OFFICE
Messrs. Wrigleys, Ltd.)

The duties of a cashier in houses other than the biggest concerns include the granting of credit and the fixing of a customer's limit. This is very responsible work in any office, and the greatest care should be exercised to see that customers are not allowed goods on credit to a larger amount than the references obtained warrant. The matter of references and the giving of credit are fully dealt with in Chapter VIII.

## Supervision of Staff.

The general supervision of the office staff should be such that the cashier is in a position to know

been posted up. Or it may be desirable to get out statements quickly in some particular month, and as this can only be done by additional labour, a little adjustment of the duties of the office staff is necessary.

## Staff Duties.

Although it is desirable that certain permanent duties be given to every assistant in the office, there is no reason why additional duties should not at times be taken over by any of the staff. For instance, remittances received during one part of the month are only small, possibly only one-fourth of the number received about the

10th or 11th (heavy remittance days); consequently the cash posting clerk should, during his quiet time, undertake other duties which may be allotted to him by the cashier.

And, on the other hand, the clerk responsible for the posting of customers' remittances receives assistance from other clerks during *his* busy period. All this is a matter for adjustment, and in order to arrange it on an equitable basis, it is essential that the cashier should be fully conversant with the whole of the office duties. For instance, he should know approximately the time required to make out statements of account in A to B section; the period required to post 200 Journal entries; the checking of invoices, etc.—in fact any of the office work, so that shirking on the part of assistants would soon be discovered.

## Keeping a Watch on the Work.

It might be supposed that a walk round the office to see how the work is progressing in each of its sections—invoicing, statements, posting, checking, etc.—would be sufficient supervision. The writer finds this is not enough, as memory has to be relied upon to a great extent. For instance, the statement clerk, when spoken to at 3 in the afternoon, and in response to an enquiry as to how the work stands, may answer: "I've done about half of the C to H ledger." The one responsible for checking Cash Book postings may point out that he has almost completed checking the 8th. However, the cashier would very likely not be able to remember the position of any particular duties as they stood the previous day or to say what work should have been got through by 11 o'clock the next morning.

A simple method of keeping a close watch on the whole of the office work is to have a chart ruled each month so that notes may be made against any particular section at the time of examination. The heading of the paper might show the days of the month as—

JUNE, 192-

1 2 3 4 6 7 8 9 10 11 13 etc.

and at the side, the clerk's duties—

Invoices.
Statements.
Day Book postings.
Cash Book postings.
Purchase Ledger, etc.

In supervising the work generally on 9th June the cashier may find, for instance, that the statements done by 4 p.m. on that day complete the Section ME-MI; that of the Day Book postings for 7th June there remain still two pages (86 items) to post. This information the cashier could briefly record on his chart, so that in examining the work the following day he could form a very good idea as to whether or not a clerk had done his work conscientiously.

Except in a very small office where the cashier is coming into contact with his staff at very frequent periods, an office chart is a necessity, not only in order to get the best results out of one's assistants, but as a quick means of ascertaining the real workers.

## Punctuality.

A cashier should insist upon punctual attendance on the part of his assistants. In no section of the house is it more necessary that work should be commenced strictly to time. Orders must be passed quickly so that the department assistants are not held up in any way. If the office staff should be late, it will often result in orders being held up, department assistants kept waiting, and a general disorganization of the morning's work. For this one reason alone, it should strictly be laid down that no latitude will be allowed as regards timekeeping of the office staff.

CHAPTER IV

# THE CASHIER AND HIS DUTIES: INVOICES, STATEMENTS, ETC.

THE invoicing of goods and the making up of the Journal showing the trade done day by day, are matters of considerable importance.

## Invoicing System.

A system which will be found useful to many houses is here briefly outlined.

We will assume that Blank & Co. have ten departments. After orders are approved by the credit manager, they are passed for dissection, and a copy is made for each department concerned.

They receive an order from Jones, Birmingham, the goods required being: gloves, hosiery, trimmings, lace, smallwares. An order card is made out as shown on p. 290.

The lace assistant sends down to the forwarding room Jones's goods and attaches the departmental slip. As each lot of goods arrive, Jones's card is marked showing which items are down. Goods from four out of the five departments have been received, but it will be seen from the despatch card that hosiery department have not executed the order. These goods are sent for, and the whole of the order is now complete. The despatch clerk thereupon clears the card after filling in the necessary particulars, and the slips (5) are then forwarded to the invoice office to be dealt with.

Invoices are made out and checked, but in order to simplify the entries in the Day Book it might be advisable to have a small printed form with all departments shown, so that in completing

Received
9 *a.m.*

*Nov.* 10/2–

Traveller____*Sale*____

Mr. *W. T. Jones,*
*Main Street,*
*Birmingham.*

| Butts. | Cords. | Dyes. | Emb. | Gloves. | Hosy. | Laces. | S. wares. | Trimgs. | Wools. | Etc. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | × | / | × | × | × | | |

Instructions—
*Send Atlas Express, to-day certain. Contract.*

Completed _____

Packed by_____

Despatched by_____

Case_____Pcl._____Bale.

each invoice the figures can be filled in opposite each department concerned. If this were not done it would mean that in making entries into the Day Book every slip would have to be clearly marked showing the amount charged by each department, or an alternative would be to write on the top slip the particulars as—

| | £ | s. | d. |
|---|---|---|---|
| Gloves . . . . . | 2 | 7 | 8 |
| Hosiery . . . . . | 5 | 2 | 2 |
| Etc., etc. | | | |

It will be obvious, from the form shown opposite, how much easier will be the work of the Day Book clerk in entering up from a printed slip. Also, if an error should have been made by a clerk in invoicing or checking, one is at once able to fix the responsibility, as these printed forms must be signed by the one who makes out the invoice and also by the checker.

## Dividing Up the Work.

It is a good plan so to divide up the work in the invoice office that "slacking" on the part of any assistant is prevented. In some of the big wholesale houses this is done by dividing up the travellers' grounds between the whole of the invoice clerks. For instance, the clerk, Smith, takes the travellers, Rudd and Blake. Jones will be responsible for making out invoices on Everett's and Woodward's ground, and so on. This method of dividing up the work is very useful at busy periods, and is worked in the following manner.

Goods will be ordered through the travellers during July and August, but delivery is not required until September 1st. One will realize the tremendous amount of invoicing which would have to be got through if departmental slips were not passed to the office until goods were ready for despatching. Assuming that delivery is required for the first week in September, the despatch room is instructed to send for goods probably ten days before. As these travellers' orders are sent down to the packing room, each card is marked **X**

Traveller_____*Rudd*_____

Date. *10th Nov.*, 192-. No. of Slips. 5

Per____*Atlas Express Contract*_____

Remarks :

Invoiced by_____*J. Smith*_____
Checked by_____*J. Brown*_____

| | | | |
|---|---|---|---|
| Buttons . . . . . | | | |
| Cords . . . . . | | | |
| Dyes . . . . . | | | |
| Embroidery . . . | | | |
| Gloves . . . . | 3 | 6 | 9 |
| Hosiery . . . . | 9 | 5 | 2 |
| Laces . . . . . | 2 | 19 | 7 |
| Small Wares . . . | 3 | 2 | 2 |
| Trimmings . . . . | 4 | 19 | 10 |
| Work . . . . . | | | |
| | | | |
| | | | |
| | 23 | 13 | 6 |
| Case . . . . . | | 10 | 6 |
| Total . . . . . | 24 | 4 | – |

against each department as goods arrive; but instead of waiting until the order is complete, especially where big lots are entailed, those which are ready are sent to the invoice office as "incompletes." For instance: Rudd, the traveller, sends in an order for E. Jones, Wrexham, goods being required from the six departments, gloves, buttons, trimmings, furs, hosiery, and embroidery. A big slip comes down from trimmings, buttons and hosiery departments. These slips are passed to the invoice clerk who is responsible for the travellers, Rudd and Blake, and to the slips is attached a printed ticket marked "incom." After being made out by the clerk, the invoice with slips attached is put on the "incompletes" file to await the remaining slips. These may not come up for a few days, but seeing that all travellers' orders are treated in this manner, one will realize that invoices will undoubtedly be got away more quickly when half or more are often made out some days before the due date for despatching, than would be the case if slips were only sent up to the invoice office as completed.

It must not be thought that any confusion is likely to occur by working in this manner. The despatch clerk, in marking his card on which are shown seven departments, of which four department slips have already been sent to the office, can see that goods from three departments are still required—

J. Brown, *Main Street, Bury.*

*10th Nov.*, 192–.
Post
Sale.
*Trav.*

| Butts. | Cords. | Dyes. | Emb. | Gloves. | Hosy. | Laces. | Etc. |
|---|---|---|---|---|---|---|---|
| × | × | / | × | / | / | × | |

When these remaining slips with goods are received in the packing room, the card is then marked and cleared, and the three slips are passed to the invoice office marked: $\frac{Com:}{7}$ which signifies to the clerk that completion can now be made of this invoice for J. Brown, and that there should be seven slips in all.

A trader not in a large way of business may divide the invoicing among his staff by making each one responsible for certain sections. For example, if there are six ledgers, one will know from usage the number of accounts in each and a division may be made accordingly. One clerk will take all accounts in towns A to G, another H to O, and so on.

## Day Book Entries.

In order to get out the trade result on each representative's ground, the slips showing the travellers' trade are sorted out. This is easily done, as the name of each traveller is stamped on the department slip by the assistant getting up the goods. The entries made in the Day Book under each department are simplified by the use of the printed form which is attached to the slips by the despatch clerk before passing to the invoice office. If the printed form, previously shown, were not used, it would mean that all the slips would have to be unpinned and the entries made in the Day Book from each slip separately. After being entered the slips would again have to be fastened together in order to keep the complete invoice to each customer intact.

Entries are made in order of travellers' grounds. For instance, all trade done by Barker is written up in the Day Book and one line is left blank to show the division between Barker and the next traveller, Flanagan, and so on until all entries have been made.

The Day Book is ruled to show each department's trade, as buttons, cords, gloves, hosiery, etc., so that on the completion of each day's entries, we are able to get out, not only the total trade done by each traveller, but the travellers' figures for every department.

A *trade returns book* should be kept—this is usually a lock-up book—in which entries are made daily from the Day Book, and at the end of each half-year or whatever period stocktaking is done, one can ascertain immediately the trade done by each department, and also the travellers' figures for each section.

## Posting.

In debiting each customer's account it is essential that there is some effective check on postings, as otherwise an item of, say, £14 6s. 10d. may be entered as £4 6s. 10d.

The usual method is to go through the whole of the postings. Two clerks are required for this work, the one taking the Day Book calling out the ledger folio. For instance, Jones on the Day Book will call out $\frac{Be}{16}$; Brown working on the Ledger cabinet turns up $\frac{Be}{16}$ and replies: "Brown, Chorley, 10th November, £26 13s. 2d."; Jones repeats: "£26 13s. 2d.," and the items on the Ledger card and Day Book are ticked by each in red ink.

Many instances have been known, however, where mistakes have been made by checkers in passing items which have been posted incorrectly, such as £75 6s. 4d. being posted as £25 6s. 4d. This is gross carelessness and such an error would, perhaps, never be found out unless a customer, upon receiving his statement, pointed out the difference between his invoice amount and the sum shown on the statement. The following

method will not only obviate the necessity of having two clerks on Day Book checking, but will ensure that the correct amounts have been posted, so preventing any possibility of a loss occurring.

Let us assume that the Day Book entries on 9th November, numbering 325, total up to £759 16s. 4d. The clerk, in making each posting to the Ledger account, also enters on a slip of paper (ruled cash columns) the same amount.

agreement of the Day Book figures and those shown on the check slip. A little extra time is taken by the Day Book clerk in making the additional entries, and adding them up, but against this must be reckoned the time taken by two clerks in checking and ticking postings.

## Statements.

In making out statements, which are usually despatched by most firms every month, it is

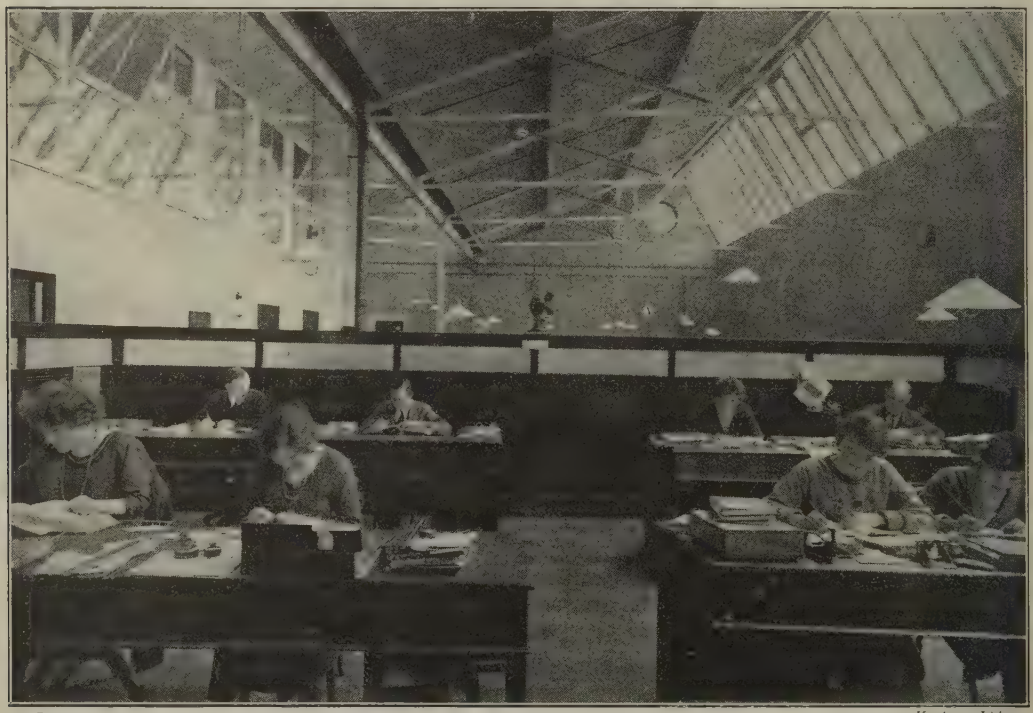


*Photo* *Kealeys, Ltd.*

SMALL SECTION OF COUNTING HOUSE
(T. G. Tickler, Ltd.)

Brown, of Bury, is debited with £24 6s. 2d., and this amount is entered on what we might term the check slip. This is continued until the whole of the items for one day have been posted. The check slip is then added, and should total up to the amount as shown in the Day Book, £759 16s. 4d.

Should the Day Book and check slip agree, it may safely be assumed that the total sum of £759 16s. 4d. has been posted to customers' accounts.

The value of this system is that it prevents any possibility of loss, as the total amount of any day must be posted, and this is proved by the

advisable to put on the left-hand corner the Ledger and folio number. For instance, the credit manager, in going through the statements, may consider that certain customers should be written to failing a remittance coming to hand in, say, ten days' time after the statements are despatched. He therefore jots down on a card or paper slip (at the top of which is marked the date statements are sent out), sections as follows—

| Be] | Bu | Bury | Cab | De | Eb | Fe | |
|---|---|---|---|---|---|---|---|
| 14 | 5 | 23 | 22 | 19 | 22 | 19 | and so on. |

This card is then posted forward, say, a fortnight ahead, in a "follow-up" file, and when

it comes up for attention the accounts are quickly referred to without reference to an index being necessary. The folio and number will also be found of considerable value for the posting clerk, as will be explained later when dealing with remittances.

The writer strongly recommends the use of card cabinets in place of bound Ledgers, for the following reasons. In starting a book Ledger it is impossible so to apportion the leaves that one can rely upon the accounts of, say, Brown & Co. of Bacup, being confined to certain pages. Assuming that Brown's is an active account, it may be opened at folio 20 with the idea of running to 29 or 30 during the life of the Ledger. Others doing only a casual trade are given very little space. After a time we find Brown's account has reached and completed page 30, and as folio 31 is used for some other customer we have to transfer Brown to, say, folio 118. This change of folio must be recorded on the index. Now with the card Ledger in use, Brown's account folio never alters. If he is given Ledger card $\frac{Ba}{23}$ he retains this folio as long as the account remains on the books.

One will realize the advantage to a posting clerk, who in time will remember the folios of most of the active accounts so that with many of the postings from the Day Book the index is not required at all.

With the bound Ledger in use this turning up of an account, without referring to the index, could only be done occasionally, seeing that the folio of an account is often changed.

## Time Saved in Making out Statements.

Take, again, the time spent by a credit manager or whoever may be authorized to go through the monthly statements, in turning over the pages of a bound Ledger to see that no accounts have been missed. Brown's account is reached at page 20, but the credit manager must turn over all pages up to 31 before coming to an active account—a sheer waste of time. With the card Ledger in use every account is an active account, so that a statement is made out for every card in the cabinet.

The reason that a statement must be made out for every card in the cabinet is that all accounts which are paid up and cleared are put away in the closed cabinet in exactly the same order as they would be placed in the open cabinet.

Statements after being made out should be at once gone through by the credit manager and passed for post. If held over for a day or two, it will be found that many of the accounts have been paid. The result is that corrected statements will frequently have to be made out and the incorrect ones destroyed—a waste of time and stationery. A good plan, and one of considerable help to the credit manager, is to list the names of those customers where it would be considered advisable to refer to an account before passing an order. This listing is, of course, an addition to the usual follow-up system, which must be adopted in connection with all overdue accounts. The names listed might be typed on cards and kept constantly on the credit manager's desk, so that in passing the morning's orders, he has always in front of him the monthly lists to refer to. On these lists may be added anything of special importance, such as: "Blank, Burnley; Big amount—get reduced"; or: "Brown, Chorley; *New* account overdue."

Should an order come along from a house well known to the credit manager, but which does not appear on the monthly list, it will be fairly safe to pass it without referring to the Ledger card. In writing out statements it is preferable first to write up the items for the past month, and in the event of other outstanding items to render these below as—

192--

| | | £ | s. | d. |
|---|---|---|---|---|
| 1 Nov. | To Goods | 22 | 6 | 4 |
| 7 „ | „ „ | 14 | 8 | 6 |
| 10 „ | „ „ | 1 | 9 | 2 |
| 14 „ | „ „ | 3 | 4 | 8 |
| 18 „ | „ „ | 26 | 4 | 2 |
| 21 „ | „ „ | 9 | 6 | 3 |
| 27 „ | „ „ | 4 | 8 | 5 |
| | | £81 | 7 | 6 |

| | *Cr.* | £ | s. | d. | | | |
|---|---|---|---|---|---|---|---|
| 7 Nov. | By Box | | 18 | 6 | | | |
| 21 „ | „ Returns | 4 | 7 | 6 | | | |
| | | | | | 5 | 6 | – |
| | | | | | £76 | 1 | 6 |
| To Sept. a/c rendered | | | | | 43 | 7 | 6 |
| „ Oct. „ | „ | | | | 29 | 7 | 2 |

The totals of each month's figures should be clearly shown in blacklead by the clerk making out statements. Take the one shown above. The clerk adds up the November debits, £81 7s. 6d., credits, £5 6s. These figures are marked in blacklead against the last item posted (27th November).

| £ | s. | d. |
|---|---|---|
| 81 | 7 | 6 |
| 5 | 6 | – |
| £76 | 1 | 6 |

The clerk then fills in on the statement the September and October figures, which were entered on the Ledger card when the September and October statements were made out. The blacklead figures are not rubbed out until a ruling-off is effected in the Ledger.

One will find it an advantage to get statements out early each month, as soon as the postings of the previous month are up to date. The writer has found, from many years' experience, that remittances come in much earlier if statements are got out, say, by the 10th of a month, than

is the case if they are not cleared until the 20th or later. One reason is that some traders will check and pay accounts immediately they come to hand; another that some business houses pay statements in the order in which they are received, instead of making payments on a certain date each month. The advantage of getting in accounts quickly, even if there is only a difference of a few days, will be appreciated especially if one's bank balance is fairly low; such a difference, although slight, will sometimes save the necessity of having to ask one's banker for an overdraft.

CHAPTER V

## THE CASHIER AND HIS DUTIES: REMITTANCES, CASH BOOKS

A SATISFACTORY method of dealing with cheques, etc., received by the morning's post, is to sort them in alphabetical order of name or town, previous to entering in the Cash Book.

### How to deal with Cash Received.

We will assume that Blank & Co. have four Ledgers or card cabinets and that these are divided under towns in the following order: A to G; H to M; N to S; and T to Z. It will be an easy matter to sort remittances in four lots, after which these are entered in Ledger order commencing A to G. One will realize that the few minutes taken in sorting remittances will enable the posting clerk to do his work in much less time than would be the case if entries were made in any order. For instance, on page 121 of the Cash Book there are entered accounts in A to G Ledger; page 122, H to M; and so on. It means that all A to G accounts may be posted without turning over a page, whereas if entered indiscriminately, the clerk may have to go through four or five pages of entries in posting A to G Ledger before being sure that every one is done. Thus, the sorting will save a very considerable amount of the posting clerk's time. Another way of saving time is to leave the receipts in exactly the same order as entered in the Cash Book, so that the posting clerk can turn up the folio required from the statement instead of having to refer to the index for any account required. Another advantage of having the statement before one when posting remittances, is that one can see very quickly what each payment is intended to balance. Brown, for instance, remits £90 5s. against items appearing in the Ledger as follows—

| | £ | s. | d. |
|---|---|---|---|
| September a/c . . . | 39 | 16 | 2 |
| October a/c . . . | 42 | 10 | – |
| November a/c . . . | 60 | 5 | – |

Now without the statement it would be a difficult matter to ascertain what Brown intended to pay. Consequently, if the posting only were made of £90 5s. it would be necessary, when sending a further statement, to add the September, October, and November items together and deduct the payment of £90 5s. A reference to Brown's statement shows that he has deducted 2½ per cent from the items for the first two months—

| | £ | s. | d. |
|---|---|---|---|
| September . . . . | 39 | 16 | 2 |
| October . . . . | 42 | 10 | – |
| | 82 | 6 | 2 |
| 2½% . . . . | 2 | 1 | 2 |
| | £80 | 5 | – |

and that the balance of £10 is to be placed to his credit against the November items.

Very possibly the credit manager may not see his way to allow the discount deducted, in which case a letter would be sent with the receipt showing the discount deducted (if any) and the balance brought down.

### Balances should be Acknowledged.

It is advisable, whenever an account is not ruled off and a balance is shown, that such balance be mentioned to the customer when forwarding a receipt for the amount paid. If this is not done the customer may conclude that any deductions made on the statement have been agreed to and accepted. Consequently, should he the following month receive a statement showing a balance brought forward he will no doubt express annoyance that the matter was not brought up at the time of making his payment. Whatever the balance may refer to, be it an empty box not yet returned, part of discount not allowed, or credit for goods not yet received, particulars must be given and a detailed statement sent showing how the balance is arrived at. An explanatory letter might be sent, and the customer asked if he prefers to pay the balance at once in order to square his account to date, or "if it should be more agreeable to you we will bring down the balance to your next account; please let us know."

A copy of such a letter should, of course, be kept, so that in the event of a dispute when the balance is shown on the following month's statement, the customer may be furnished with a copy of the letter sent him. Against the balance brought down on the Ledger card should be marked up in ink the date on which the customer was advised, as—

*To Balance: £2 6s. 3d.; wr.* 6/11/192__

In the case of a payment being made on account, such as a cheque for £20 against items for, say, the month of November, amounting to £56 7s. 6d.,

it is not usual or desirable to bring down a balance, as a further payment of another £20 might be made a fortnight later, and so on. Some customers, especially the slow payers, will keep on remitting payments on account, instead of squaring up to a date; consequently payments over quite a period, sometimes a few months, will be shown on a Ledger card.

In such a case a good plan is to get two detailed statements made out to a certain date, say, from the last squaring off to the end of November. Both these statements are sent to the customer, with a letter on the following lines—

> We enclose statement in duplicate showing a balance against your good self to the end of October of £124 16s. 3d. We do not appear to have had a ruling off of the account for some time, and in order to balance our books to a date, we shall esteem it a favour if you will kindly check the figures shown herewith and, if you find them correct, sign one of the statements and return it to us. The duplicate you will no doubt retain for your own convenience.

The advantage of getting a signed statement is that there can be no dispute with respect to the items included in the balance brought down. A signed statement, also, is proof that the customer admits liability up to the date rendered, and would perhaps be of considerable advantage in the event of legal proceedings being taken.

Ledger cards would be marked—

> *To Balance*, £124 16*s.* 3*d.*; *Signed statement, Nov.* 20/192_.

and the statement would be filed away for future use if required.

## Cash Book Entries.

It is advisable that two or more Cash Books be used and that a balance be made daily.

If two Cash Books are sufficient, one may be used for remittances received on Mondays, Wednesdays, and Fridays, and the other for Tuesdays, Thursdays, and Saturdays, so that an alternate book is required each day. This will prevent the posting clerk having to wait for a Cash Book while the morning's remittances are being entered up.

In getting out the daily balance, the additions should be made by one clerk and filled in in lead pencil; another clerk will go over the additions and, if correct, will write up the figures in ink and make out a slip for the cashier, showing the balance that should be in hand.

Where payments are made to a bank, the following illustrates the procedure.

Jones's traveller, who has collected some accounts, will send in an advice "paid to the London City and Midland, Bold Street, Liverpool, £80." After the advice from the bank confirming this is received, the entry on the debit side of the Cash Book reads—

> 12*th Nov.*: *Cr. Jones* £80.

And on the credit side—

> 12*th Nov.*: *Dr. Bank* £80.

Amounts paid similarly to a bank by customers will be treated in exactly the same manner—credit the customer, debit the bank.

## Cash Received Book.

In addition to the Cash Book, it may be found very convenient, especially in the case of numerous payments being made in the house by customers, to use a Cash Received Book. The advantage of using this book is that the posting clerk may keep on with his work without being requested at any time during the day to give up the Cash Book in order that the receipts over the counter may be entered up. We will assume that three clerks take money over the counter. Each clerk has his own receipt book and will enter up in the Cash Received Book at the end of the day all items taken by him which are recorded on the counterfoil receipts. Jones has collected, say, £63 7s. 6d., as shown in his receipt book. The items are entered by him in the Cash Received Book, and the amount received is handed to the cashier who signs for it. The other two clerks, Brown and Robinson, have received £64 10s. 6d. and £98 10s. 6d. respectively, so that the total amount received by all three should amount to £226 8s. 6d., which the cashier will see agrees with the amount he has received. The total will then be transferred from the Cash Received Book or counter book to the daily Cash Book as—

$\frac{C/R}{23}$ £226 8s. 6d., and in the Cash Received Book the reference is: "Transferred to Cash Book 298."

As a matter of fact, the Cash Received Book takes the place of the proper Cash Book, but only for receipts over the counter, and is used only as a matter of convenience where payments over the counter are numerous.

No disbursements are ever entered in the Cash Received Book, these always being entered in the Cash Book proper.

## Travellers' Accounts.

A suitable method of keeping a check on travellers' balances is to open an account in the Ledger in exactly the same way as in dealing with a customer's account. Jones starting out with his new samples when commencing his journey at the beginning of the year—the previous half-yearly figures having been settled—is given £20 on account. An entry is made in the Cash Book for this sum, which is posted to Jones's account.

The account is continued month by month until the six months' journey is completed, when the traveller returns to the house for his new samples.

F. B. JONES——*Traveller*——

| *Dr.* 192–. | | £ | s. | d. | *Cr.* 192–. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|
| Jan. 2 | To Expenses | 20 | – | – | Jan. 5 | By Bank | 44 | – | – |
| „ 5 | „ A/c collected | 44 | 6 | 8 | „ 7 | „ Cheque | 19 | 16 | 10 |
| „ 7 | „ „ „ | 19 | 16 | 10 | „ 16 | „ Bank | 20 | – | – |
| „ 13 | „ „ „ | 14 | 3 | 2 | „ 20 | „ Cheque | 41 | 2 | 3 |
| „ 19 | „ „ „ | 35 | 8 | 6 | „ 20 | „ Bank | 25 | – | – |
| „ 20 | „ „ „ | 64 | 2 | 3 | „ 30 | „ Cheque | 45 | 9 | 6 |
| „ 30 | „ „ „ | 45 | 9 | 6 | „ 31 | „ Expenses down | 25 | 18 | 2 |
| | | | | | „ 31 | „ Bal'ce down | 22 | – | 2 |
| | | £243 | 6 | 11 | | | £243 | 6 | 11 |
| Feb. 1 | To Balance b/d | 22 | – | 2 | | | | | |
| | „ Expenses | 25 | 18 | 2 | | | | | |

Any money owing by the traveller is then paid in to the cashier and the total expenses, as shown, are posted up direct from the traveller's account card.

CHAPTER VI

## THE CASHIER AND HIS DUTIES CHECKING; RECEIPTS

THE greatest care should be taken by those clerks responsible for checking the numerous postings. Day Book postings we have already dealt with in a previous chapter, but the same system would hardly be found suitable for cash postings, owing to additional checkings being necessary with every posting made.

For instance, Mr. J. Jones, who pays his account, deducts so much discount and claims £2 13s. 6d. for goods which he states have been returned, but which are not shown against his account in the Ledger. The consequence is that the account cannot be ruled off until these items are passed or dealt with in some way. Or, again, there may be cash payments for goods which will not be posted up in the Ledger for two or three days.

### Checking an Account.

Remittances made by customers and payments made to manufacturers and others require a check to see that the sum received or paid is properly posted, and there must also be a check on the correct ruling off of each account. Below is given a copy of a customer's account, showing items debited and a payment by him made to balance to a date—

The customer's payment of £191 6s. 4d. is ticked in the Cash Book and on the customer's Ledger card, but seeing that the account is ruled off it is the checker's duty to ascertain if the account is correctly balanced. This is done by adding both debit and credit sides to see that the totals agree and—this is most important—to be quite sure that any balance is brought down correctly. In the case of Brown's account, shown above, it would be noticed that the last item, 31st October, £20 10s. 6d., has not been paid. As a matter of fact Brown, in sending his cheque, points out that these goods invoiced on 31st October did not reach him until 2nd November, and requests that the item be brought down and included on the November statement.

### Balancing.

To balance the account there is entered on the credit side of the card—

*31st Oct. : By Balance down* £20 10*s.* 6*d.*

and this balance should appear on the debit side—

*31st Oct. : To balance from above* £20 10*s.* 6*d.*

Now the danger is that often enough the Ledger clerk, in making the posting and in order to rule off the account by making the debit and credit sides agree, will post up the item on the credit side, "By balance down," but omit to show the balance below. The result is that if the error is not found by the checker, the statement sent, showing the November figures, omits the item for 31st October.

One will realize the danger of considerable loss occurring if an effective check is not made in connection with cash postings. Some years ago the writer had instances where items, amounting to over £100, were omitted to be brought down, and these errors were not discovered until nearly twelve months after the postings were made, and then only by accident.

### Instructions for Posting.

As a method of preventing any similar mistake the following rule was put into force, and the clerks were informed that failing strict compliance with the instructions given, the matter would be

2

A/c opened : *Ref.* 2643

JAMES BROWN & CO., *Mch.* /14. *Always pays for dis.*

23 MAIN STREET, BIRMINGHAM. *Cr.* £250/300.

| 192–. | | *G.B.* | £ | s. | d. | £ | s. | d. | 192–. | | *G.B.* | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | forward | | | | | | | | | forward | | | | | | | |
| *Oct.* 9 | | 138 | 19 | 6 | 4 | | | | *Oct.* 17 | *By Returns* | 213 | 27 | 8 | 8 | | | |
| „ 17 | | 191 | 50 | 10 | 8 | | | | *Dec.* 28 | „ *Cheque* | 111 | 191 | 6 | 4 | | | |
| „ 24 | | 302 | 55 | 8 | 10 | | | | „ 28 | „ *Discount* | 111 | 4 | 18 | 4 | | | |
| „ 26 | | 218 | 98 | 7 | 6 | | | | „ 28 | „ *Balance down* | *G.B.* | 20 | 10 | 6 | | | |
| „ 31 | | 272 | 20 | 10 | 6 | 244 | 3 | 10 | | | | | | | 244 | 3 | 10 |
| *Dec.* 28 | *To Balance* 31/10/2– | *G.B.* | 20 | 10 | 6 | | | | | | | | | | — | | |

*Photo* *Keatevs Ltd.*

A CORNER OF A SHOWROOM

(Longpark Pottery Co,, Ltd

*Frontispiece*

dealt with in an exemplary manner. The instructions to the clerks were worded as follows—

When posting cash remittances it is essential that a proper ruling off in the Ledger is effected, and that should there be any balances on either the debit or the credit side, these must be brought down. The danger would appear to be that an item which is not paid is filled in on the right-hand side of the Ledger account with a view to bringing down to a customer's debit, but after ruling off the account this amount is not brought down, consequently there is danger of its being lost, seeing that the only check against this is the customer who, receiving a statement, points out that an item has been omitted. In future, therefore, any balances must be brought down previous to an account being ruled off. After the cash and discount are posted and it is seen that there is a balance to be brought down, this must immediately be brought below, after which the account is ruled off to a date.

The same system will, of course, apply to Purchase Ledger postings, and in fact to postings to any account where it is possible for a balance to occur.

The posting clerk should not in any circumstances be allowed to check his own postings, as the one mind doing a certain task in which a mistake is made, could more easily pass the mistake a second time than would be possible by another clerk going over the work for the first time.

## Petty Cash.

The cashier should appoint one of the clerks to take over the duty of dealing with petty cash disbursements. Small sums required for departmental wants, items for carriage, telegrams, etc., are paid and recorded against each section for which purchases are made or expense incurred. These debits to departments need only be made once a month in order to avoid making innumerable postings.

In dealing with petty cash items, a system which would be found suitable to most traders, is worked in the following manner—

The petty cash clerk is supplied with, say, £5 on the first of the month, and further amounts are handed over as required. A small card cabinet will be found useful to record against each department the amount paid day by day. Tabbed cards are used and marked "Gloves," "Hosiery," or whatever may be the department or section. No amount is paid over to a department assistant unless a slip is sent down to the office filled in and signed by the buyer or his first man.

These slips are filed away—each department having a separate file—in order of date, and at the end of the month the head of each section,

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A Corner of a London Merchant's Office

Showing curved counter and grille

who has, of course, kept a record of the amounts paid to him, is advised of the sum debited to his department. If any dispute should arise as to the amount being correct the file is produced for confirmation.

In order that the necessary debits may be made to the respective departments, the petty cash clerk makes out a statement for the cashier, showing the total amounts paid out during the month as below—

| | £ | s. | d. |
|---|---|---|---|
| Buttons department | 3 | 7 | 6 |
| Cords department | 2 | 1 | 9 |
| Embroidery department | | 19 | 6 |
| Furs | 1 | 9 | 6 |
| Gloves | 3 | 9 | 6 |
| Hosiery | 4 | 17 | 6 |
| Laces, etc., etc. | 2 | 1 | 9 |
| Packing room | 8 | 6 | 4 |
| Office | 2 | 19 | 6 |
| General | 7 | 16 | 3 |
| | £37 | 9 | 1 |

| | £ | s. | d. |
|---|---|---|---|
| Cash received | 40 | – | – |
| Paid | 37 | 9 | 1 |
| Balance | £2 | 10 | 11 |

The entries, totalling £37 9s. 1d., are entered in the Cash Book and posted to the departments concerned.

## Receipts.

In dealing with receipts it is advisable that a trader should have some system whereby it is possible for him to show at a later date how any particular remittance was made up. Nowadays payments are made by cheque, money orders, postal orders, Treasury Notes, and Bank Notes. Many remittances are sent by registered post and sometimes one will receive a payment partly by cheque, Treasury Notes, postal orders, etc., so that unless a proper record be made it might be difficult, in case of a complaint as to the sum sent, to answer correctly a question as to how a remittance was made up.

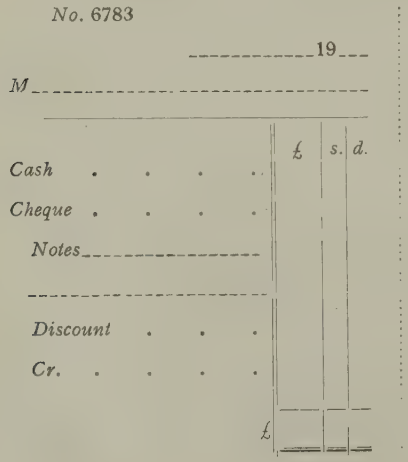
To show exactly what is meant by this, we will assume that J. Smith forwards a remittance for £26 7s. 8d. in settlement of an account. This payment is made up as follows—

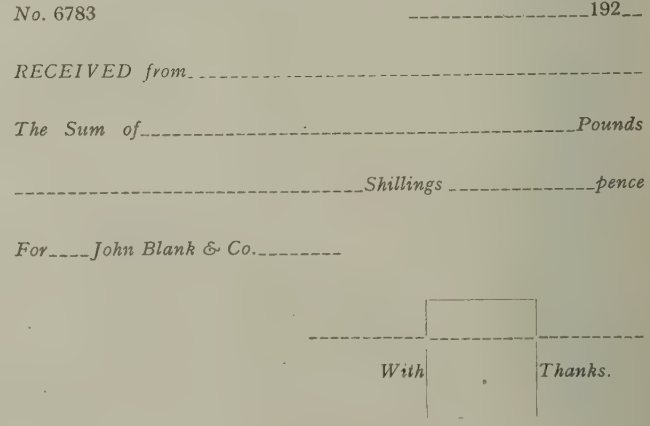
| | £ | s. | d. |
|---|---|---|---|
| Cheque made payable to J. Smith and endorsed by him | 16 | 5 | – |
| Treasury Notes | 10 | – | – |
| Postal Order and Stamps | | 2 | 8 |
| | £26 | 7 | 8 |

Now, simply to make out a receipt for J. Smith, *Received* £26 7s. 8d., with the usual signature and date, without giving or taking details, would be somewhat risky. For instance, the cheque made payable to Smith might be returned unpaid, in which case there would be a difficulty in tracing from whom the cheque had been received. If one turned up all J. Smith's accounts there would not be an amount shown to correspond with the cheque returned. Or, again, many people remitting Treasury Notes, etc., by registered post, will not send any accompanying letter or state what amount is enclosed. In this case one should at once have the sum checked and initialed, and in making out a receipt show how the total is made up. A good form of receipt is as shown below.

## Receipt Books.

Receipts should be made out in duplicate, one of which is sent to the customer and the other retained by the house. A suitable method is to use books to contain the receipts which are numbered consecutively. These are especially useful for amounts paid over the counter in order



that particulars of amounts paid in, discounts allowed, etc., may be clearly shown. If a customer brings in a statement, this is returned to him with the receipt attached, and the details of deductions are noted on the voucher left in the book.

If this were not done a clerk would at times have a difficulty in effecting an easy balance when posting if only the amount paid in were entered in the Cash Book.

For instance, a customer whose account was a little overdue may make a request that full discount be allowed, and such a request might be granted in certain circumstances. As the discount would be entered on the counterfoil slip, there would be no danger of the ledger clerk writing that the discount deducted was not correct, and bringing down a balance to the customer's debit.

When a number of clerks take money over the counter it is advisable for each one to have a separate book, and at the end of a day or whatever time the cash, etc., is handed over to the cashier a balance is made up by each one showing the total sum paid in, which must correspond with the amounts shown on the duplicate receipts.

In the event of a receipt being made out incorrectly and a fresh one having to be done, the clerk should take the book and receipt to the cashier who should mark the receipt form and counterfoil "Cancelled" and leave the cancelled receipt form intact in the book. A spoiled receipt form should never be destroyed as the auditor is almost certain to require it to be produced.

## Receipts for Travellers' Use.

Many firms allow representatives to collect moneys on their behalf, and the amounts received are advised to the house each day. Full particulars are furnished showing amount collected, discount and credits allowed, as—

Traveller__*J. Brown*___ *Nov.* 2/192_.

| | Counting House. | | | Dis. | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| 435 | *F. Dodd & Co., Leeds* | | | 16/6 | 32 | 4 | – |
| 436 | *J. Slack* | ,, | | 15/6 | 30 | 5 | – |
| 437 | *H. Woodward* | ,, | Cr. 2/9/9 | 3/15/– | 96 | 5 | – |
| 438 | *G. Flanagan* | ,, | Cr. Box 12/6 | 13/6 | 26 | 4 | 2 |
| | | | | | £184 | 18 | 2 |

Cheque enclosed value £96 5s.

Paid to the Lancashire and Yorkshire Bank, Leeds, £80

(Signed) *J. Brown.*

It will be noticed that a number is shown on the left-hand side of the traveller's cash sheet against each customer's name. These are the receipt numbers which are run on the same principle as those used in the house.

Brown is given a book containing receipts 401 to 500, and each of these receipts must be accounted for. If one is spoilt it must be sent to the house to be cancelled and recorded, and when all the receipts have been used by Brown, the book containing the duplicates is returned to the office, a fresh one at the same time being sent on.

CHAPTER VII

# THE CASHIER AND HIS DUTIES: WAGES AND SALARIES

A SUITABLE method of charging up wages to each department, or section, is to have a ruled book, each page of which covers a period of thirteen weeks (four pages to twelve months).

## Wages Book.

A sample page is shown below—

**GLOVES DEPT.**

| | 192_ Net. | | 4th Aug. | | | 11th Aug. | | | 18th Aug. | | | Etc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84/– | *Brown J.* . | 82/10 | 4 | 2 | 10 | 4 | 2 | 10 | 4 | 2 | 10 | |
| 86/– | *Jones, T.* . | 84/10 | | | | | | | | | | |
| 84/– | *Dean, W.* . | 82/10 | | | | | | | | | | |
| 50/– | *King, Ada* | 49/1 | 2 | 9 | 1 | | | | | | | |

It will be noticed that every third line is ruled rather thickly and is easily distinguishable from the ruling of the other lines. The person paying will find this of considerable help, especially when payments are being made under columns which are a distance away from the assistant's name. Without this thick ruling the eye, in glancing from the name to, say, the tenth or eleventh column, might be inclined to get on a line above or below the one required.

Each page is headed with the name of the department and the left-hand side is given to employees' names and the wages received. Instead of entering the full amount of wages without deductions, it will be found much more simple to enter only the net amount paid, leaving the matter of insurances to be calculated at a later date, as will be explained.

For instance, Miss M. Jones, in the Gloves Department, receives the weekly sum of 45s. and has 9d. deducted for Health Insurance and 2d.

for Unemployment Insurance, so that this girl receives 44s. 1d. net. The total amount paid in wages to Gloves Department for the week ending 4th November is £28 7s. 6d. Each department is treated in a like manner, and when the whole has been completed, a list is made of all departments showing the total sum paid £256 7s. 6d. These entries are made in the Cash Book and posted to the debit of each department concerned.

## Insurance Stamps.

Regarding the stamping of employees' cards, this duty devolves upon the employer, and purchases of stamps may be made each week after the amount required has been calculated. These weekly amounts may be posted to a general employees' insurance account but at the end of six months, or whatever time may be the stock-taking period, the total amount is got out and postings are made from this account to the debit of each department concerned. This is arrived at in the following manner. We will assume that for the six months ended 31st December, there has been paid the sum of £196 10s. 6d. The male payment works out at_____per head and the female at_____per head. To arrive at Gloves Department amount we multiply each amount by the number of males or females, as the case may be, so that the total charge to this department may be set out thus—

_____males } 26
_____females } weeks.
_____
Total.

We arrive at the amount for other departments in the same manner and the total arrived at should balance with the amount paid, £196 10s. 6d. It will be found much easier to make these adjustments at the end of each six months than to take out a weekly amount. Further, by working out a net payment to employees each week and showing this sum plainly in the Wages Book, there is no necessity for the person paying wages to be troubled with any question of deductions.

## Staff Cards.

It is advisable to keep a record of every assistant in one's employ. In order to do this a small card cabinet may be used, each assistant's particulars being recorded on a card giving date engaged, commencing wage, age, advances as they occur, date left, and reason for leaving. A sample card is shown herewith—

_____Dept.

Name_____ Date Engaged____

Address_____ Age_____

| Commencing Salary. | Increases in Salary. |
|---|---|
| | |

References :

Date of Leaving :

Reason for Leaving :

## Salaries.

Salaries are usually paid on the last day of each month to heads of departments, first sales, travellers, buyers, workroom managers, etc.

DEPARTMENTAL SALARIES BOOK

November, 192_

| Cheque No. | | Butts. | | | Cords. | | | Gloves. | | | Etc. | | | Etc. | | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| 9763 | *T. Brown* | 33 | 6 | 8 | | | | | | | | | | | | | | | |
| 4 | *F. Jones* | | | | | | | 29 | 3 | 4 | | | | | | | | | |
| 5 | *W. Dean* | | | | 25 | – | – | | | | | | | | | | | | |
| 6 | *J. Flanagan* | 33 | 6 | 8 | | | | | | | | | | | | | | | |
| 7 | *T. Johnson* | | | | | | | | | | | | | | | | | | |
| 8 | *J. H. Moult* | | | | | | | | | | | | | | | | | | |
| 9 | *H. Coulthurst* | | | | | | | | | | | | | | | | | | |
| 9770 | *W. Ward* | | | | | | | | | | | | | | | | | | |
| 1 | *E. Jones* | | | | | | | | | | | | | | | | | | |
| 2 | *J. Woodward* | | | | 45 | – | – | | | | | | | | | | | | |

As travellers who are frequently away from the house on "pay day" have to be paid by cheque, it is desirable to pay all assistants who are on a monthly salary in the same manner. A suitable method is to have a small book ruled to cover one month to a page, as shown on p. 300.

One gets the total amount paid to each section, which when completed may be posted direct to the debit of the department concerned. It will be noticed that the cheque number in numerical order is shown by the side of each name, so that the checking of the amounts with the Pass Book is simplified.

Bonuses and commissions are usually paid only each six or twelve months, so that such payments may be passed through the Cash Book when paid, and posted direct from there to the debit of each department.

CHAPTER VIII

## OPENING NEW ACCOUNTS

When new accounts are opened, either in the house by a first purchase or through the efforts of a firm's representative, it is essential that satisfactory references are obtained before any goods are despatched.

*By permission* *Messrs. Stanley Jones & Co., Ltd.*

A Fine Example of an Enquiry Office and Waiting Room

### References.

The most suitable references are, of course, those houses who have already been trading for some time with the person who is desirous of opening an account. If the replies received respecting Blank & Co.—who have just purchased a substantial opening parcel—are something to the effect that: "Blank & Co. have been on our books for the past seven years; payments are always made on discount terms, and we should not hesitate to send goods up to £200/300"; or,

"Always pay on best terms; very satisfactory account and would credit to any reasonable amount; been trading with these people for some years," one would feel justified in giving credit to Blank & Co., with every confidence.

When a man who has been trading for some time declines to give as references the names of some of the houses with which he is doing business, one must exercise great care before giving credit. In fact, one could not but view with a certain amount of suspicion the refusal by a trader to give business references, and in such a case, failing security being given, it would be advisable to ask for cash before goods are despatched. One must come to the conclusion that where trade references are refused, it is obvious the man's account is backward with other houses; possibly his credit has been either stopped altogether or very much curtailed. In fact, the writer may say, from an experience of many years of "watching the credits," that the above view is usually a correct one.

## Opening with Beginners.

Naturally those people just commencing a business are unable to give trade references, and will usually give the name of their bankers.

Bankers' references to-day cannot be relied upon with such confidence as can those received from business houses. A bank manager, as a rule, does not know a great deal about his clients—except, of course, those who have been doing business with him for some years.

In the case of a beginner, he has probably had an account for a few months only, and although he may have a substantial balance at his bankers at the time of starting business, this balance can easily fade away in the first month or so of trading. Another point in connection with bank reports, and the sometimes unreliable nature of such as against trade references, is that a banker will rarely report unfavourably in respect of any of his clients. What is meant is that, if a trader has on previous occasions been unable to meet cheques through lack of funds at his bankers, and such cheques have been returned R/D (refer to drawer), a banker would never in any circumstances, in replying to an enquiry respecting a firm's integrity, give this information.

A reply frequently received from bankers is: "Very respectable. Had account with us for two years. Consider trustworthy."

## Prompt Payment Desirable.

Consequently it is considered advisable that prompt payment be requested in settlement of the opening order, unless the account is suitably guaranteed by someone of good financial standing. A person just commencing cannot reasonably expect to be placed immediately on credit terms, solely on a banker's reference, but subject to the opening parcel—which is usually a substantial one—being paid for at once, and also subject to a banker reporting favourably, a small credit might be given (the limit, of course, to be fixed), and one would then have to be guided by experience.

If a credit limit of, say, £60 were arranged, payment to be made in two months, it would be advisable to see that payments were made strictly on due dates, or, in the event of the limit being exceeded, to request this new customer to make payments on account as fresh purchases were made, so that the total amount owing was not at any time in excess of the limit fixed.

## Guarantee.

New accounts are often guaranteed in the following circumstance. A man wishes to start his daughter in business and is agreeable to finding the capital necessary to give her a start. An amount is placed to her credit in the bank, and possibly her first purchases are made on strictly cash terms. She then desires credit, but is unable to give any reference except her bankers. This is a case when it is desirable that the amount be guaranteed, and the suggestion is made that possibly her father would guarantee the account up to a certain amount. A guarantee form is sent to the father, and he is asked to fill in the amount for which he is prepared to accept responsibility. On being asked for the form to be returned duly completed, he is requested to forward his references. These being satisfactory, his guarantee is accepted and credit given to the full amount of the guarantee, or even more, should the account prove, over a period of time, to be conducted satisfactorily.

A simple guarantee form is all that is necessary, and one quite suitable for use is shown below—

(*Date*)

To *Messrs. J. Blank & Co., Ltd.*,
*Foregate Street,*
*London.*

Dear Sirs,

In consideration of your supplying to_____ _____of_____ I hereby guarantee to you payment of his account up to and not exceeding the sum of *One Hundred Pounds*, £100 : 0 : 0, and to make good any loss which you may sustain by his dealings with you.

Yours truly,

Witness:

Name_____ Signed_____

Address_____ Address_____

_____ _____

Occupation_____

This form, when completed, should be sent to the Inland Revenue Office, to be stamped with a 6d. agreement stamp. This must be done within fourteen days after the date shown on the guarantee.

## Asking for Information.

In applying to other houses for information regarding the financial standing of a firm desirous of opening a credit account, one should take the opportunity of obtaining the very fullest information. The full christian name or names (initials are not enough), should always be obtained, or, in case of a partnership run under some trading title, the full name of the partners.

In the case of a woman, one requires to be informed whether married, and if her husband is in any way responsible for her liabilities; if a widow, this should be stated. It has been found a good plan, when opening an account with a married woman, to fix the liability, if possible, severally and jointly upon husband and wife, that is, unless the references respecting the lady are excellent and make such precautions unnecessary. One will find, when writing to a firm for information respecting a person who wishes to open an account, that the replies sent are sometimes very vague. If, upon asking to be informed as to the trustworthiness and reliability of Jones & Co., one is told that "We have had the account named for some time, and have always found the account quite satisfactory; payments made on discount terms," one certainly requires more information than this, and, in order to get the fullest details, a form similar to the one shown below might be used to advantage—

(*Date*)

Dear Sir,

Having been referred to you by M _____

_____

we shall feel much obliged if you will kindly favour us IN CONFIDENCE with any information you have respecting this customer.

Trustworthiness _____

Capital _____

Financial Position _____

Are Payments made on discount terms? _____

How long have you had the A/c? _____

Extent of Credit given _____

Do you ever find it necessary to stop orders? _____

Any other information _____

We should esteem it a favour if you would kindly give your replies on the above form.

We shall be happy to reciprocate at any time, and we need hardly say that any information you give will be treated as strictly confidential.

Thanking you,

We are,

Yours faithfully,

J. BLANK & Co., LTD.,

(Cashier)

Not many firms will decline to give the full particulars asked for, and it will be obvious that particulars given on a form in detail are much to be preferred to the sometimes indefinite reports which are sent by some firms in replying to these enquiries.

When an account is opened in the house, one is enabled to obtain the fullest details, but if opened by a traveller it frequently happens that a proper report is not sent in. One will get, for instance, Mrs. Blank, New Street, Birmingham, no christian name or number of street; consequently these particulars have to be written for.

## Travellers' Reports.

Further, travellers often enough are reluctant in asking for references, thinking people might be annoyed by their doing so. One cannot understand this attitude of a firm's representative in forming such an opinion, but from many years' experience of travellers, the writer has found that some of them, instead of asking for references, will try to ascertain, by noticing the class of stock in shop or warehouse, the firms with which a trader is likely to be doing business. In order to prevent these indifferent reports being sent in, a good plan is to instruct one's representatives to fill in a form—supplies of which are given to them—with every new account opened.

**TRAVELLER'S REPORT**

(*Date*)

New account _____

Name _____

Address _____

_____

Class of goods _____

Style of premises _____

Buyer's name _____

Reference? _____ } State other houses doing business with.

_____ }

Terms arranged _____

Send goods by _____

Is stock well kept? _____

## General Report.

The traveller is also instructed to quote the firm's terms when doing business for the first time, and must endeavour to get from the purchaser instructions as to which terms he prefers. One advantage of getting a definite statement from a customer as to which terms he intends to take is that, should a remittance not be sent on due date, there is an excuse for one to write without giving offence, and

to point out that: "We have not yet been favoured with a remittance in accordance with the terms arranged with you by our representative when you placed with him your opening order. No doubt this matter has been overlooked by your good self, in which case we shall be pleased to allow the full discount subject to a remittance reaching us within the next few days."

This matter should strongly be emphasized when opening accounts, as a trader, on being requested to send payment of his overdue items, will occasionally make the excuse for delay by stating that he was not aware of the terms allowed; whereas if a definite statement by him is made when placing the order, he can always be written to and reminded of the specific terms arranged "as per your letter of such a date," or "in accordance with your request as made to our representative, Mr. ..... when placing your order on ....."

Such letters are not likely to cause any annoyance, as might be the case if the usual letter of application for payment was sent. When opening a new account, the information written on the Ledger Card can of necessity be very brief only. Name, address, and credit limit are, of course, written up, but one might with advantage also fill in the date of the first purchase, and this date will be carried forward to every new card or folio, so that one can see at a glance at any time the period that a customer has been on the firm's books. Such information is often of use in enabling one to come to a decision as to whether or not an order will be passed for execution. One will naturally have more confidence in giving additional or even longer credit to a trader who has been on the books for, say, seven or eight years, than will be the case if the account is only about twelve months old.

### Creating a Good Impression.

Opening an account in the house gives a splendid opportunity which should not be neglected of showing this new client that you are out to do the best you can for him; that it is your earnest desire to establish a friendly relationship which you hope may continue for many years. It always creates a favourable impression with a new customer if he is taken round the house by someone in authority, introduced to heads of departments where he is making his purchases, and, generally speaking, made to feel "at home."

Some business houses still cling to the idea that the cheapest salaried assistants should be placed in a department where they are the first to come into contact with a possible customer. This is not good business. We have seen many instances of junior assistants being pushed forward to attend to a customer who has probably come some distance to buy a substantial parcel, the seniors declining to come forward on the plea of having important work to do.

The result is, often enough, a small purchase only has been made, whereas had attention been given by more responsible people in the house, not only would a much larger sale have been effected, but the customer in addition would have been favourably impressed with his reception generally, and, in consequence, a mutually friendly business relationship would have been cemented on this first call. In the case of a first call, it is considered a good plan for the first assistant personally to take the customer to the counting-house, introduce him to the cashier, or, in his temporary absence, someone in authority; after which it is then left with the office section to see that for the rest of this customer's stay in the house he receives the best possible attention. It has often been said that a customer in the house is worth ten in the field. The stocks can be seen to better advantage than by viewing traveller's samples, more variety and better choice may be made; in fact, the house has a golden opportunity of effecting the most satisfactory results, and if these are not achieved, the house may, generally speaking, have only itself to blame.

## CHAPTER IX

## THE COLLECTION OF ACCOUNTS

In dealing with the collection of accounts, one must be guided to a great extent by the past experience of a customer's method of making payments; the length of time a customer has been on a firm's books; and by the value of the references received.

Assuming that Jones, who has been purchasing on credit terms for the past nine years, happened to get somewhat behind with his payments—although in the past he had been paying regularly on discount terms—one would not be disposed to use anything like the same tone in writing for a remittance as would be the case with Brown, whose transactions covered a period of, say, twelve months only.

In practically every business to-day there are, at some time during a twelve months' trading, a busy and a quiet period. One man may do principally a spring trade, another's best time is in the autumn, and so on. During his busy period, payments are usually made promptly on due dates, but during the slack time, he may get a little behind. This is quite a common thing, yet a credit man, in following up overdue accounts, will frequently overlook this fact. Consequently, it is time very well spent if, in writing up references when an account is opened, such information can be included. Even though such particulars may not be obtainable just at the moment, this information can invariably be got by a firm's representative on his first call.

## The Traveller's Help.

A traveller can be very helpful in this respect, and may obtain valuable information for the future guidance of his house in dealing with a customer's account. It is a good plan to get a traveller's report in regard to every customer he calls on. Some firms make this a rule only when a traveller opens an account himself, but it is of some importance for a report to be sent in, even although the account may have been opened in the house, or by an order sent through the post. A firm's representative, being on the spot, is in a much better position to judge of the value of a customer's business, the general class of his trade, whether he is doing well, if stocks are nicely kept, and if proper attention and supervision are given by the proprietor, than is the credit manager, who, possibly, has never seen anything of the customer, and whose opinion can only be based on references obtained and correspondence which may have ensued from time to time.

In connection with a traveller's value in this respect, there have been instances when bad debts have been avoided altogether, or very greatly reduced, by a representative's care in sending through reports from time to time. An order was sent in by J. Blank to the value of £120 for immediate delivery. His account was referred to and it was found that payments had not been made on discount terms for some little time past. The total amount owing was well under the limit fixed, and in the ordinary way the order would have been passed for execution, and a "mild" letter sent to the customer, drawing his attention to the fact that the account was a little behind, and requesting an early payment. A letter was received the same morning from the firm's traveller who reported on the account in question.

The report read—

Called on this customer to-day and waited an hour, but was unable to see him. The assistant to whom I spoke informed me that she was expecting him back any minute. I called later in the afternoon and was again informed that Mr. B. was out and the assistant was unable to say what time he would be back; she understood he was somewhere in the town but did not know where to find him. I noticed that there was quite a slackness in this business, the three assistants who were in the shop at the time appearing to be more engrossed in conversation, one with another, than troubling about the few customers who came in during the time I was there. When writing up my sheets in the hotel in the evening, I came across another traveller, from Messrs. P. & Co., who, as you know, are in quite a different line. He had the same report to make—that he had been unable to see this man on the last three journeys, so that it is evident this business is being very much neglected.

Messrs. P. & Co.'s traveller told me that he was informed—but would not give the source of his information—that Blank was neglecting his business very much, frequently coming back to his shop late in the afternoon in an unsatisfactory state; in brief, that this man was drinking a great deal, and it is quite evident his assistants are taking advantage of his absence, as there appears to be no one properly in control during the time Mr. Blank is away.

The result of this report was that the order was held up, and Blank was written to very firmly asking for settlement of the whole of the account due. Payment was not made in full but a substantial remittance was sent by return, and a request by Blank that the order given by him a few days ago would be forwarded without delay. Solely owing to the traveller's report, the order was not executed and Blank was informed that until the whole of the account due was paid off, it would be impossible to send further goods. This man called a meeting of his creditors a few months later, and eventually a composition of only 2s. 6d. in the £ was paid. The traveller's report was thus the means of saving his firm a very substantial amount.

## Travellers as Collectors.

A firm's representative can also be of very great help to the cashier's office by making collection of accounts in covering his ground. A satisfactory system which may be carried out to advantage by those traders having travellers on the road, is the following—

Assume that Jones intends working certain towns for the week commencing 6th November. He sends in a list of these towns on the Monday of the previous week.

All those accounts which are not in a satisfactory state are listed in duplicate; one copy is sent to the traveller and the other is retained by the counting-house. Name of each customer, amounts owing, and date of items are shown, so that a firm's representative is in a position of knowing exactly how each account stands.

MR. F. JONES. *Journey list for week ended Nov. 11th, 192_.*

| *Burnley.* | £ | s. | d. | *Remarks.* |
|---|---|---|---|---|
| F. BLACK, Main Street— | | | | |
| August Account . . | 68 | 16 | 4 | |
| September Account . | 73 | 19 | 0 | |
| October Account . . | 27 | 4 | 3 | |
| F. BROWN, Market Street— | | | | |
| July Account . . . | 59 | 16 | 2 | |
| August Account . . | 34 | 2 | 6 | |
| September Account . | 49 | 7 | 8 | |
| October Account . . | 23 | 17 | 6 | |
| &c., &c., &c. | | - | | |

With the list sent to the traveller, there is also forwarded an accompanying letter giving instructions respecting each account.

For instance, he may be told that "failing settlement in full by Brown, of at least the July account, we should not be prepared to accept an order. We wrote him only a few days ago, so we require you to present a statement of the account; this we enclose": or, "Mr. Black wrote us on the 2nd inst., promising to settle the August and September items on your next visit. We pointed out to him that you would be in Burnley next week, so in the event of his not paying, please remind him of his promise."

When an account has got very much behind, the traveller may be instructed not to waste any time booking an order, unless a payment is first made. A traveller's time is too valuable to be spent taking orders which are not likely to be executed.

The traveller, however, may use his own discretion in dealing with a customer, should circumstances warrant. Brown may point out that he is not prepared at the moment to pay off the overdue items, but that, as he is expecting a substantial remittance in a few days, a cheque will be sent not later than 8th November. "Your people may hold up the order I am placing with you until I send the cheque. I am not in any particular hurry for the goods." In such a case, Jones would book the order and, in sending it to the house, would make his report accordingly.

Or he may be told by Mr. Black that the goods are to be delivered on 20th November, and that remittance will be forwarded before that date.

These reports are recorded by the counting-house, and should the promised remittance not come to hand, the matter is followed up from the house.

Those accounts which are paid to the traveller are marked up on the duplicate list retained by the office, but the traveller, on the completion of his Burnley and district journey, must send in the list and a report respecting each customer.

A trader, although he may be short of money at times and unable to meet his accounts as they fall due, may yet be in a strong financial position, and, being on very friendly terms with a firm's representative, will frequently give him information which he would not furnish to the house by correspondence Such information, especially if confirmation can be obtained, may result in a bigger trade being done without the fear that one is taking an unusual trading risk.

Should an account which appears on a representative's weekly list be sent direct to the house, the traveller is at once informed. This is watched from the house, as the duplicate lists are referred to each day, and a traveller is written

Section of Bristol Office, The United Yeast Co., Ltd.

to immediately a payment of an overdue account comes to hand.

Representatives may be advised : "J. Jones, of Main Street, B. . . . settled his July, August, and September accounts this day, so we should be prepared to execute an order for £100 or so. Please record this on your list" : or, if only a moderate payment had been made, the traveller would be given a smaller figure up to which credit would be given.

Some firms do not keep their travellers in touch with the state of customers' accounts on whom they call, but this is a mistaken policy. There is, perhaps, nothing more annoying to a traveller, who, after spending a considerable time in booking a substantial order, is informed by the house that, "It will be impossible for us to despatch your order, just received for Brown Bros., owing to the unsatisfactory state of the account."

Had this traveller been informed of the position of Brown's account before making his call, he might have obtained a payment, or, at any rate, made some arrangement sufficient to have enabled the house to send the goods.

## Collections by Travellers : A System.

One of the reasons why some houses do not give particulars of customers' accounts to their representatives is that travellers are not allowed to collect accounts. Such firms will have printed on statement and invoice forms : "All payments to be made direct to Head Office" ; or, "Representatives are not authorized to collect accounts." Surely such methods ought nowadays to be relegated to the scrap heap. Trade is going to be lost by the house which cannot break away from such old-fashioned ideas. A traveller will frequently be able to get a payment by a personal visit, a result which does not always obtain by correspondence.

A suitable system for dealing with travellers' collections is the following—

Brown, who works Birmingham, collects, on 25th September, accounts from three customers, amounts as below—

| *25th September*, 192_. | £ | s. | d. | *Remarks.* |
|---|---|---|---|---|
| J. B. Tracery (dis. 13/-) . | 26 | 9 | 8 | Cr. box, 10/- |
| Jones Bros. (dis. 20/9) . | 39 | 10 | 6 | Credit 20/7/22, 18/6 |
| A. Spence (on a/c) . . | 50 | – | – | |
| | £116 | – | 2 | |

Paid £110 to London City & Midland Bank,
(New St. Branch), Birmingham.

Return Address :
*Swan Hotel,*
*Birmingham.*

S. F. Brown.

This cash collection sheet must be sent to the house the same day as payments are made, and particulars given of any deductions, discount allowed, etc., so that the account may be easily balanced.

The traveller for each ground is furnished with a list of the banks in the towns he works, where moneys may be paid in to a firm's credit without any charge. A list will be furnished by one's bankers on application, and upon furnishing the banker with a list of the towns covered. All that is necessary, when paying in cash, is to state the name of the firm to whose credit it is to be placed.

Jones (traveller), representing Blank & Co., Ltd., London, collects £80 cash in Liverpool. The bank given in this town is the Lancashire & Yorkshire Bank. The cash is handed over the counter with the request that the amount be placed to the credit of Blank & Co., Ltd., London, at the London City Westminster & Parrs Bank, Ltd., . . . . Branch.

This is a great convenience to business houses, as, often enough, travellers are paid considerable sums in cash, and one will realize the importance of moneys being banked instead of a representative carrying sums about with him, even if he may be due back in the house in a few days. Cheques, of course, are forwarded to the house by post with orders the same day as received.

The advisability of keeping one's representative fully informed as to the position of every account called upon, and seeing that regular reports are sent in, has already been emphasized.

This co-operation between a house and its travellers must of necessity be of very considerable help to the credit manager in following up overdue accounts.

It has been mentioned that, in following up overdue accounts, one must be guided to a very great extent by past experience, and unless information comes to hand which would make one feel that a more than ordinary trading risk was being taken, the older account should receive more consideration in regard to extended credit than would be given to a comparatively new account.

## The Cashier's Responsibility.

In going through the statements each month, a cashier would, before passing these on to be posted, have to decide whether the total amount owing as shown on the Ledger was in excess of that marked up as the credit limit, or if the account was overdue on discount terms ; and, if so, whether or not it was desirable to call the customer's attention to this fact. With the older and well-known active accounts, a reminder would perhaps not be sent even although the account was a month or so overdue. Possibly the customer may be one who happened regularly to be a little behind with his payments at a certain time of the year, and a letter sent asking for a payment might be the means of closing the account.

Consequently, the cashier has to exercise the very greatest tact and care in order to avoid giving

offence to any customers, without, of course, taking anything more than an ordinary trading risk.

There may come a time, of course, when a strong communication may have to be forwarded to one of the past best accounts.

## Request for Payment.

In writing to a customer requesting payment of an account, it will be found a good plan to adopt a form letter of varying strengths, the first of which would be, of course, of a mild character, except in the case of a new account, of which later mention will be made.

We will now take the regular customer and deal with the statements as the cashier goes through them each month. Those which are quite in order—payment up to date, and credit not in excess of the limit—are passed to the post desk for despatch. Those which are overdue, or when it may be considered that the amount owing is too large, are thrown out to be specially dealt with.

These are then gone through and the kind of follow-up letter which must be sent is decided upon.

In giving a number of specimen letters of different strengths, from very mild to very strong, it is much more satisfactory and likely to bring better results that a personally dictated letter be sent, properly signed by the cashier. Form reminders, usually small printed slips in different colours, gummed at the foot of a statement, are frequently ignored. These are forwarded by many firms in order to save postage cost, but, for one thing, customers do not care to receive a request for payment in an "open" envelope, and with some of them there is a feeling that these reminders are seen by persons for whom they are not intended.

A request for payment should always be sent in a sealed envelope, as such a communication must be reckoned of a strictly private nature, and it is not advisable, for obvious reasons, that assistants in any store or shop should be informed of the fact that their employer is behind with his payments.

## Form Letters.

The following letters may be found useful for most business houses—

1. In enclosing statement of the account owing, may we point out that part is a little overdue? We shall be glad to be favoured with an early remittance.

2. A few days ago we sent you statement of account and a reminder that part of the amount owing was somewhat overdue. We trust you will give this matter your early attention.

3. Have you overlooked the letter which we sent you a few days ago respecting the overdue account? We would again draw your attention to this matter, and hope you will let us hear from you by return.

4. We again have to draw your attention to the account which is now considerably overdue. We are somewhat surprised that this matter has not received your attention, and we trust you will let us hear from you without further delay.

5. We have to express very considerable surprise at not having heard from you respecting our applications for the outstanding account. We cannot understand the reason why our communications have been ignored, and must really ask you to let us hear from you at once, as we cannot allow this overdue account to remain longer unpaid.

6. We have written you frequently respecting the outstanding account, and are surprised that it has not received your attention before this. We cannot allow this matter to stand over in this indefinite way, and we must insist upon a remittance being made at once, otherwise we shall have to adopt stronger measures in our own interests.

7. We do not intend to allow of any further delay in payment of the account; consequently, we have now to state that unless settlement is made within seven days from date, we shall place the matter in our solicitors' hands with instructions for them to take whatever steps may be necessary in order to enforce payment.

8. We again beg to draw your attention to the account which still remains somewhat overdue in spite of the fact that you recently favoured us with a remittance. We therefore trust you will give the matter your further kind and prompt attention.

9. We are very much disappointed after receiving your recent promise that you have not sent on a remittance. The account, as you are aware, is much overdue, and we must ask you to see that payment is sent without further delay.

10. We are rather disappointed at the somewhat indefinite way in which you write in respect to your account. We certainly cannot regard your letter as satisfactory, and must ask you to give this matter your immediate consideration, as we require payment of the account without further delay.

These letters may be done by a typist in her spare time, and put in numbered boxes, according to strength. When despatching to a customer, the typist simply fills in the name, address, and date.

The advantage of using these letters is that the recipient knows he is receiving a personally dictated letter from the cashier of the firm with whom he is doing business, and the "pulling" effect is infinitely greater than would be the case by sending printed reminders.

Further, the cashier's time is not taken up by having to dictate account letters whenever a customer has to be written to. Statements are passed to the typist and are marked in black lead, giving the number of the letter to be sent and the follow-up date. On 25th September, the statement for Jones, Bristol, is marked I (5), which is sufficient instruction to the typist to send No. 1 letter to Jones; and a follow-up card, making 5th October the follow-up date, is made out as shown—

Bri.
23

J. Jones,
20 Main Road,
Bristol.

*I* 25/9/2_. (5)

## Follow-up Cards.

It will be found each month, in going through the statements, that many of the accounts which are overdue are already being followed up. In such a case it is only necessary to fill in the follow-up date in pencil in the left-hand corner

of the statement, and after a Ledger or cabinet has been gone through, the statements are put with the follow-up card under the correct date in the diary. When writing any of these customers the statement is forwarded with the letter sent. For following up overdue accounts, the ordinary office "tickler" is very suitable. This is an open cabinet with guide cards to represent the months of the year, and cards numbered 1 to 31 days of the month.

Any correspondence relating to an account is attached to the follow-up card. Should a customer write on, say, 25th September, promising a remittance for the following Monday, 2nd October, the account is referred to, and it is seen that the follow-up date on the Ledger card is 28th September. If the promise is acceptable, the matter under date 28th September is transferred in the follow-up cabinet to, say, 3rd October, and the Ledger card is marked accordingly. By this method it is always easy to place one's hand immediately on any correspondence relating to an overdue account. When an overdue account has been paid, and the correspondence taken out of the follow-up cabinet, it is desirable that some record be made so that one can tell, upon referring to a customer's account—perhaps to decide if an order may be passed—if this customer has previously been written to respecting his account.

The Ledger card is always marked in red ink with the last follow-up letter and date sent to a customer before settlement was effected.

Brown, of Burnley, may have been written to three times in September respecting his account, 1, 2, 3, the last letter being sent 25th September. Payment is made 27th September, but the Ledger card is marked in red ink $\overline{3}$ 25/9/22. Should it be necessary again to write Brown respecting his account during December, and the last letter sent before receiving payment is No. 4 on 13th December, this number and date is recorded on Brown's account card.

This information will be found extremely useful, as it enables one to come to a decision as to what action may be taken at some later date.

## New Accounts.

As previously mentioned, it is not advisable to give new accounts the same extended credit as may be allowed to old customers.

When a new account is opened, terms are clearly stated, and one naturally expects, on a first transaction at any rate, that ordinary discount terms will not be exceeded.

In going through the statements, a list might be taken out of the new accounts, name, address, amount, and due date, in order to see that payments are made according to the terms allowed.

It is not very encouraging to find a new customer requiring extended terms on a first transaction, and one would be fully justified in writing asking for the account to be attended to, even although only a few days overdue.

## Stopping Orders.

At times it may be necessary to stop an order owing to a customer being behind with his payments, or the amount owing being in excess of the credit limit. With new accounts it is desirable, where one has had only a very short experience, to keep a very close watch on orders, especially with beginners where there is frequently a tendency to over-buy. In such a case, the customer may be written to on something like the following lines—

> We are obliged for your esteemed order to hand this morning, for which please accept our best thanks. This order we notice amounts to £60, which if added to the figures already standing to your debit in our books, would bring the total to a sum rather in excess of what is warranted in view of the very short experience we have had with your good self.
>
> However, in view of the fact that part of the account is not yet due, on ordinary discount terms, and also in appreciation of the very kind support you are extending to us, we are prepared to allow you a special discount of_____ subject to payment of the_____ (stating the month) account being remitted per return.
>
> We have placed your order in hand and shall be pleased to hear from you.

A new customer will undoubtedly realize that a firm is justified in writing in this way when there has been only a very short experience of an account.

When an order sent in by an old customer has to be stopped, one has to use very great care in dealing with the matter, as otherwise it might mean the closing of the account.

If one has been trading with a customer for some years, one would be somewhat reluctant to hold back goods ordered, unless, of course, the account was getting very much behind.

With the old account it might be advisable to send on the goods required and enclose with the invoice a letter which would not be likely to cause annoyance. The latter may read—

> We have much pleasure in enclosing invoice of goods which we have despatched this day, and trust they will open out to your satisfaction.
>
> May we respectfully take the opportunity of drawing your attention to the account, part of which is now somewhat overdue. This matter may have escaped your notice, in which case we trust to be favoured with an early remittance.

A follow-up card could then be made out and pushed forward in the follow-up cabinet, say, 10 days ahead, and should a reply not then be forthcoming, a further reminder would be sent.

The mere fact of the order being at once despatched, without first of all writing for a payment, would show confidence, and a letter sent with the invoice asking for payment would not be likely to offend the customer.

For reference in dealing with customers' orders, it has been found a good plan, whenever an order

is stopped, to write in the Ledger "*o/s*" and the date in red ink. Later on one can see, in referring to a customer's account, whether or not an order has been stopped on a previous occasion, and such information may considerably help one in coming to a decision.

The whole question of making collections cannot satisfactorily be settled by any fixed rules.

A letter which would have no ill effect with one customer might very easily cause another customer to decline to do further trade.

Going on past experience is the best guide for anyone whose duties are watching customer's credits, and a little diplomacy is often necessary in dictating letters, especially to what are known as "touchy" customers.

*Photo* *Kealeys, Ltd.*

GENERAL OFFICE
(Messrs. R. S. Murray & Co., Ltd.)

## CHAPTER X

## THE CHECKING AND PAYMENT OF ACCOUNTS

IN dealing with purchases and the payment of accounts, it is essential that instructions be given to buyers to pass invoices to the office immediately goods come to hand and are checked off. Holding up invoices in a department will sometimes result in discounts being lost, and to a firm which is in the happy position of being able to pay promptly, this is a serious matter.

The reason why invoices are sometimes held up in a department is that a buyer may have been making purchases in excess of the amount allowed him for any one month, and rather than let the counting-house find this out he will retain invoices for November and pass through in December, after the November figures have been taken out.

It is therefore necessary that a careful check be kept on purchases, as a firm may be placed in a very serious position if it is unable to meet its obligations as they fall due.

A cashier should therefore be able to ascertain at the end of each month what amount he has to find for the following pay day.

Very few buyers nowadays are allowed to purchase without restrictions, as used to be the case in past years, when big stocks were shown at the end of a financial year by some departments, the result often being a big loss owing to goods having to be sold at a sacrifice.

## Passing Invoices.

A good system for making certain that invoices are not held up unduly in a department is the following—

As manufacturers' invoices are received through the post each morning, they are sorted under their respective departments and stamped or marked in numerical order. Assuming on 1st November we receive invoices as follows: 7 for Gloves Department, 6 for Hosiery, 10 for Smallwares, etc., these would be numbered 1 to 7 Gloves, 1 to 6 Hosiery, 1 to 10 Smallwares. These invoices would be entered up direct—name, date of invoice, number, but no amount—to the Purchase Journal as below—

GLOVES DEPARTMENT

| 1922. | | | | | | |
|---|---|---|---|---|---|---|
| 1 Nov. | 1 | *J. Brady & Co., Ltd.* | Bra. 22 | 83 | 6 | 4 |
| 2 „ | 1 | *E. Catling, Stratford* | Ca. 14 | 21 | 19 | 2 |
| 3 „ | 1 | *Grundy & Lamb* | Gr. 22 | 5 | 14 | 8 |
| 4 „ | 1 | *Rudd & Blake* | Ro. 41 | 41 | 19 | 6 |
| 5 „ | 1 | *F. Slater & Co.* | Si. 14 | 11 | 3 | 4 |
| 6 „ | 1 | *H. Woodward & Co.* | Wo. 12 | 2 | 2 | 3 |
| 7 „ | 1 | *G. Flanagan* | Fi. 19 | 7 | 4 | 8 |
| | | &c., &c. | | | | |
| | | Carried forward | | 532 | 16 | 9 |

It will be noticed that a number is placed against each invoice, No. 1 being the first invoice commencing any one month.

When invoices are passed by a buyer to the counting-house it is an easy matter for the clerk, after checking the extensions, additions, etc., to enter the amount in the cash column, as, seeing that each invoice is numbered consecutively in the Journal, the name required is easily found. When the November totals (purchases) are being taken out, it may be found that Gloves Department have seven invoices which have not been passed. The buyer is then informed that invoices for November, Nos. 86, 94, 99, 104, 105, 107 and 110 are still required, and these must be passed immediately or some satisfactory explanation given as to why they are being held up.

This system enables a trader to know exactly what purchases are being made each month by his buyers. A head of a department, knowing that his figures are being carefully watched by the counting-house, would hesitate to go beyond the limit figures allotted to him. Where invoices are passed as soon as required direct to a department, without previously being recorded by the office—as is usual with most business firms—it is impossible for a proper check to be kept on a buyer's purchases.

A buyer also cannot have the excuse that he has not had an invoice when it is pointed out to him by the Purchase Ledger clerk that, in checking a statement sent in by a manufacturer, an invoice is missing for 5th November. The Purchase Journal is referred to, and he is told that 5th November invoice, No. 26, was sent to his department on 6th November.

The system also enables the manager to refer to the Purchase Journal at any time during a month, to ascertain the amount of purchases that are coming through for each department, and to see if a buyer has reached the limit allotted to him. The small trader, especially, will find this system an excellent one for keeping a check on purchases.

## Guard Book System.

A system in use by some houses in dealing with purchases is that of posting invoices in a large Guard Book containing 200 or 300 sheets of plain paper, the pages being numbered in numerical order. Invoices are folded so that when the book is opened the name of the manufacturer only is seen, but opposite the name is entered the amount of the invoice as below—

*26th September*, 1922.

Folio
J. Blank & Co., 216 37 14 8
Newgate Street,
London, E.C.

From this book the items are posted to the credit of the respective manufacturers. This is a somewhat expensive method of dealing with manufacturers' invoices, as, when a Guard Book is fitted with invoices, it takes up a lot of room. Consequently, the books have to be stored out of the way, and whenever reference to one of these invoices has to be made, the book has to be brought to the counting-house. Further, as these Guard Books cost about 12s. 6d. to 15s. each, one can soon incur a big expense.

The system previously outlined will be found to be not only cheaper as regards cost of books, but more efficient in every way. The invoices at the end of each month—kept in numerical order—are parcelled up and labelled with the name of the department and month—

Gloves Department:
*November*, 1922.
1 to 156.

## Arranging Terms with the First Purchase.

In doing business with a manufacturer or wholesaler for the first time it is advisable to

arrange the terms of payment previous to goods being delivered. The buyer is in a position to obtain better terms *when placing the order* than would be the case if the counting-house wrote for these particulars after the goods had been delivered.

The counting-house would probably get *usual* terms, but the buyer is in the position of obtaining *special* terms. For one reason, the manufacturer's or wholesaler's traveller is naturally desirous of doing business with a new man, and a certain amount of discretion is allowed him by his house, if it means the difference between securing or losing business. Some manufacturers, upon being written to for terms, may state that one month's credit is allowed, less a 2½ per cent discount, but it is quite possible that somewhat better terms may be obtained if a buyer, when placing the order, informs the traveller that: "My firm pay all accounts promptly on the 10th of each month for all goods purchased the month previous, less a 3¾ per cent discount: I shall be glad if you will arrange with your people to put us on these terms, as otherwise I am afraid I shall have to pass you": or, "We obtain these terms from all the other houses with whom we are doing business, and if you are unable to oblige us in this respect, I shall have to place my enquiries for your class of goods elsewhere." Some readers may argue that manufacturers and wholesalers, having certain terms, are not likely to make any exception. The writer agrees that in a general way these terms are adhered to, and that, once having started to do business with these houses, one is not likely to obtain better terms at a later date. When placing the first order, however, one is in a strong position and, speaking from his own not inconsiderable experience, the writer asserts that more favourable terms can be arranged by giving buyers instructions to go on the lines as indicated above when making a first purchase.

The terms are written up on the account card when making a first posting, so that, when the statements are being checked, the Ledger clerk is cognisant of the discount to be deducted.

It is advisable that the terms arranged be confirmed in writing, so that, should only the *usual* discount be taken from the statement, one can write the manufacturer "that the discount taken off is as arranged with your representative: see our letter dated 1st November, 1922."

## Checking Statements.

When statements are received it is a good plan to stamp the date of receipt at the foot. Most houses get out their statements promptly, but there are others, especially during busy periods, who send out statements very late—sometimes after the date due for payment—and should the manufacturer write that the cheque just received should have been sent seven days earlier on the terms arranged, one is in the position of pointing out that the statement was received, say, only two days previously, and that "we are, therefore, in no way to blame for the delay in payment."

The stamping of the date on statements is also a check on the Ledger clerk, in watching that his work does not get behind.

In comparing the account rendered with the Ledger card, the items are ticked on the statement if they correspond to the Ledger figures, allowances or credits, of course, being deducted previous to the statement being passed for payment. Blacklead figures are shown on the Ledger folio or card, but, in order to enable a quick balance to be made by the Ledger clerk, it is considered an advantage to make the postings before the cheques are despatched. By doing so, one has not to refer

J. BLANK & CO.,
22 MAIN STREET,
BIRMINGHAM.

*20th to 19th pay 10th following month less 3¾%.*
*Arranged, L.B., Sept. 15/22.*

| *Dr.* | | | | | | | | | | | | | | | | | | | | | | | *Cr.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922 Dec. | 8 | To Cheque | | 122 | 135 | 2 | 8 | | | | 1922 Sept. | 20 | By Goods | | 42 G. | 39 | 17 | 6 | | | | |
| „ | 8 | „ Discount | | 122 | 5 | 5 | 4 | | | | „ | 25 | „ „ | | 91 G. | 14 | 8 | 11 | | | | |
| | | | | | | | | | | | Nov. | 8 | „ „ | | 132 G. | 66 | 14 | 3 | | | | |
| | | | | | | | | 140 | 8 | – | „ | 18 | „ „ | | 146 G. | 19 | 7 | 4 | 140 | 8 | – | |
| | | | | | | | | | | | „ | 23 | | | 150 | 83 | 2 | 1 | | | | |

to an index to find the card number of any account, seeing that the folio is marked up on the left-hand top corner of the statement when it is being checked.

## Pass Debits Quickly.

It has been mentioned that a manufacturer's invoice should be passed to the counting-house immediately goods are received and found correct. The same rule should be strictly observed in passing debits to manufacturers, as, otherwise, an account may be paid promptly only for it to be found that goods have to be returned ; and should there not be other items standing to the credit of a manufacturer, the account would be overpaid. In the event of no further goods being purchased from this manufacturer, a debit may not be discovered for some months later, possibly at stocktaking period.

A debit to a manufacturer which is made out by a buyer after the invoice has been passed for payment, should be brought down specially to the counting-house, with a slip attached on which is marked, "Goods returned, debit for shorts," or whatever may be the case, "Invoice dated 17th November." The Ledger card would be referred to and the debit posting at once made, so that the deduction could be made from the statement. If the account had already been paid, and there was nothing, or not sufficient, owing to enable the debit to be deducted, a statement would be sent to the manufacturer with a request for a cheque "in order to balance our books."

## Cheque Payments.

In making cheque payments, a special column may be used in the Cash Book, and the total amount of a day's entries can be posted in one sum to the Bank Book. Above is shown a page with a special ruling, giving a column for cheque payments.

The numbers on the left-hand side are the receipt numbers, and as the acknowledgments are received these are ticked in the Cash Book. Should a receipt not come to hand in a reasonable time, a request is made for one to be sent.

## Checking Pass Book.

A great deal of time is often taken when checking the Pass Book with the Cash Book entries, owing to the irregular way in which the cheques are presented for clearance. Cheques sent out on, say, 5th November, may be entered through the Bank Pass Book previous to cheques forwarded on the 3rd November, so that, whether names and amounts are called out from the Bank Pass Book or Cash Book, the entries required are not easily found. This difficulty can be overcome and the checking of the Pass Book done in a fourth of the time usually taken, by arranging with one's bankers to have the entries made in the Pass Book not by name but under numbers only, and for cheques to be shown as far as possible in numerical order. A bank manager will readily agree to this, as it gives far less labour to his staff to enter the number of cheque than to record the name of the payee against each amount. One will realize how much easier it will be to check by number than by looking down a page for a name, although one might enter payments under names in alphabetical order.

| 1922 | Nos. | | Cheque Nos. | | Bank | | | Discount | | | Cash |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Brought forward | | | 142 | 6 | 9 | | | | |
| Nov. 1 | 1 | *J. Blank & Co.* | 9769 | 29 | 28 | 6 | 4 | | 14 | 3 | |
| | 2 | *T. James* | 9770 | 42 | 14 | 18 | 6 | | 11 | 4 | |
| | 3 | *Brown & Simpson* | 71 | 119 | 32 | 6 | 4 | 1 | 5 | – | |
| | 4 | *Hardy & Co.* | 72 | 76 | 28 | 9 | 6 | | 14 | 9 | |
| | 5 | *Clery & Co.* | 73 | 25 | 19 | 7 | 6 | | 10 | 9 | |
| | 6 | *Bowker, G.* | 74 | 315 | 32 | 6 | 4 | 1 | 5 | – | |
| | 7 | *T. Smith & Co., Ltd.* | 75 | 119 | 80 | 1 | 2 | 3 | – | 10 | |
| | | &c., &c. | | | | | | | | | |

Another help in checking the Pass Book is to record every tenth cheque in red ink, such as 4330, 4340, 4350, etc., so that in requiring to find 4335 one will, after coming to 4330 or 4340 (in red ink), look immediately between these two numbers. This may appear to the readers of little importance, but it has been found of considerable aid, especially in checking a large number of entries.

The receipts, which are started at No. 1 at the beginning of each month, may be strung together in numerical order, parcelled up, and labelled on the outside cover with the date, as—

RECEIPTS.
*June*, 1922.

CHAPTER XI

## HOW TO DEAL WITH COMPLAINTS

In spite of the most effective system that may be in existence in any business house, either wholesale or retail, it will not prevent complaints being received. Whatever the nature of a complaint may be—and some are quite often very trivial—it should receive the most careful attention. Many accounts are lost owing to a little thoughtlessness, a tactless reply, or a shade of indifference expressed in a communication sent to a customer in reply to a complaint.

### Retail Trade.

In the retail trade, complaints will be very numerous, at any rate in comparison with the number received by a wholesale house. Whenever a complaint is made, even if the complaint be an unreasonable one, a customer should not be met in a spirit of antagonism. Putting oneself for a moment in the customer's position will sometimes give the retailer an entirely different point of view.

Turning down complaints indiscriminately, for instance, in the cases of split gloves (probably the customer's fault in buying a size too small), or fading colour of a material purchased, or whatever the reason may be, is not good business.

Every complaint which appears to be genuine (or, at any rate, not unreasonable), should immediately be met by replacing the article returned.

*By permission* *The United Yeast Co., Ltd.*

SECTION OF OFFICE FOR TYPISTS

Other complaints might be settled by meeting the customer half-way. An offer to repair a torn article and forward when ready, post paid, would probably give the customer satisfaction. It is inadvisable to allow a departmental salesman or saleswoman to handle a complaint without making sure that he or she has sufficient tact and ability to deal with it satisfactorily.

In the retail trade it seems desirable that the manager of a department, or, in his absence, a responsible person appointed by him, should deal with all complaints. For one thing, customers in dealing direct with one of the "heads," will realize

that they are being given proper consideration, which would not always be the case if any assistant interviewed them.

The exchange of a line brought back owing to some defect, real or imaginary, is often enough a good advertisement for the house. "Blank's are so obliging," a lady will tell her friends when recounting her experience.

## Short Delivery.

The retailer doing a mail order trade will have complaints of short delivery, such as the following :

I ordered and sent cash for 6 pairs_____gloves. The parcel has just come to hand, but only 5 pairs were enclosed. Will you please send the other pair ?

For the retailer to point out that "our system of checking is so efficient that we feel sure the six pairs were enclosed when the parcel left here," will in all probability mean the losing of this customer's future trade. The system of checking may be excellent, but the human element which enters into all transactions prevents any system being absolutely fool-proof.

Possibly a pair may have been sold to one of the retailer's assistants (house parcels), and the parcel usually containing ½ doz. pairs has been again made up and put into stock with only five pairs enclosed.

A customer does not usually make a claim for shorts unless he or she is quite convinced that something is missing. The number doing so with the view of getting something for nothing is infinitesimal.

## Records.

A retailer will find it very useful for future guidance to keep a record of each complaint and the nature of it. A small book may be used in each department for this purpose, and the whole can later be summarized under different heads for further investigation. Assuming that a number of complaints are received respecting a certain line, and that the complaints made are all very similar, it is obvious that the line is going to be a troublesome one to sell, and the sooner the matter is dealt with the better.

In the retail trade the great bulk of complaints will be made personally, so that one is in a better position to come to some arrangement satisfactory to a customer.

## The Wholesale House.

In the wholesale trade, probably 95 per cent of the complaints are made through the post, so that the very greatest care must be exercised in penning a letter in reply, otherwise there is the likelihood of trade being lost owing to a dissatisfied customer closing his account.

A complaints clerk's position is a very responsible one, and it is essential that he should have considerable tact and discernment in dealing with the somewhat difficult problems which he has to contend with almost daily.

The complaints received in a wholesale house are very varied ; many can be disposed of satisfactorily in a few minutes ; others require much care and keen investigation before a reply can be sent. Complaints may be as to short delivery, not as ordered, wrong prices, not sent to instruction, late delivery, full discount not allowed, and for many other reasons.

In the writer's opinion it is advisable that a counting-house man be appointed to deal with complaints. For one thing, he is a disinterested party, and is likely to give more care and closer investigation to a complaint *re* short delivery than would be given in the case of a department man who, by passing a credit, considers he is lessening the profits of his section.

Of course, where a complaint is departmental, a reply must be sent from a department, but supervision should always be exercised by the counting-house, whose aim should be to retain every customer's trade.

## A Good System.

A very good system, and one which is carried out by a well-known Birmingham wholesale firm, is for all original letters relating to complaints to be held in the office. Brown & Co., of Manchester, write to them that : "Referring to the invoice just to hand, we find you have delivered only 1¾ doz. 142 Silk Blouses, whereas 2 doz. are invoiced. The package does not appear to have been tampered with in any way, and the writer personally investigated the unpacking. Perhaps you will kindly look into the matter and let us have credit note for the ¼ doz. delivered short."

Here is an old customer making a claim which means that, if allowed, a credit will have to be passed for about £3. The department buyer is naturally reluctant to do this, but in face of the letter received (which is signed by one of the firm), it would be a risky business to decline to do so.

Possibly, a letter is sent down by the department to the complaints clerk pointing out that "the goods were carefully checked by two assistants in the department, both of whom are quite confident that the full quantity as invoiced was in the boxes when passed out for despatch. It seems to us that the three missing blouses must have been pilfered in transit" ; and requesting the customer to make a claim on the carriers, and this in spite of the fact that one of the partners, in writing, stated that he personally investigated the unpacking, and that the package had no appearance of being tampered with.

A more diplomatic letter would be one expressing regret at the shortage in delivery, pointing out that the matter had been gone into, and that the two assistants responsible for getting up the goods

stated that the lines were carefully checked before being made up. And in enclosing a credit note for the missing articles, it might be well to suggest that a further search be made, "as it appears to us that if the goods were not pilfered in transit, there must be carelessness at this end for two of our assistants to pack up only 1¾ doz. instead of the 2 doz. as invoiced."

This would probably appeal to the retailer, who would do all he possibly could to trace the missing articles.

If a customer makes a claim for shorts, he must be convinced that the goods delivered were not as invoiced, and it *always* pays to pass credit in these circumstances; otherwise you may lose the account.

It is no uncommon thing for a customer, after receiving a credit for goods invoiced and not delivered, to reply a day or so later, regretting the trouble to which you have been put, but "the missing articles were found at the bottom of the packing box under the straw packing. We return credit note; please allow original invoice to stand."

## Counting-House Complaints Book.

It has been suggested that *all* complaints should be replied to by a counting-house man. The following is a good method. A ruled book giving the different departments is used, and as each complaint is received it is entered as shown above.

Complaints are copied for the departments or packing room, etc., and sent to each section concerned, *but the original letter is held by the complaints clerk*. If this were not done, he would not know, in reading the departmental replies, whether proper attention had been given to a customer's communications. By retaining the original letter, however, he has the whole of the facts before him.

These complaints are filed away in order of number, as entered in the Complaints Book, so that they may easily be referred to in case a matter has to be dealt with at a later period.

A man who has the one idea of saving the house every possible penny, is not going to make a good complaints clerk. He will, in all probability, lose many valued accounts, and do his firm a deal of harm.

In handling these duties, a man must be quite unbiased and try to put himself in the customer's place in dealing with every complaint which is brought before him. To become a success he should have infinite patience, tact, and the necessary ability to judge on a sound common-sense basis, every proposition that he is up against.

CHAPTER XII

# KEEPING A CHECK ON SALES

In every section of business where transactions are recorded, it is essential that the checks are such that the risk of errors is reduced to the lowest possible minimum. There is, of course, no check in existence which will prevent a careless clerk from ticking an item to a customer's debit in the Ledger for, say, £25 10s. 6d., although the Day Book entry reads £35 10s. 6d., but it is possible to prove the total postings as explained in a previous chapter.

| | | Butts. | Cords | Emb. | Furs | Gloves | Hosy. | &c. | &c. | P. Room | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Oct. 25/22* | | | | | | | | | | |
| 56 | *J. Blank, 13 Main St., Bury* | X | | | | | | | | X | *Cr. passed, goods not sent as instructed* |
| 57 | *T. Jones, Chester Road, Forfar* | | | X | | | | | | | *Deparimental error, Cr. passed* |
| | &c., &c. | | | | | | | | | | |

A different check, however, is that of providing that all goods sent out are properly charged up.

In a wholesale house goods are sent down to the packing-room in execution of an order, and after being marked off on the despatch card or book the slips are passed to the invoice office to be dealt with. An invoice is sent to the customer and the slips for the day are handed over to the clerk responsible for making the Day Book entries. But if certain slips are lost, and are not passed through the Day Book, what would be the consequences? That slips are frequently lost is easily proved. A customer writes: "Statement just received, but you omit to debit me with £35 7s. 6d., goods sent December 2nd." No corresponding entry can be found in the Ledger, nor has the item in question been posted to another account. Or again a customer writes: "No invoice received for goods delivered three days ago; require same at once." A search is made but no slips can be found for this customer.

## How Slips are Lost.

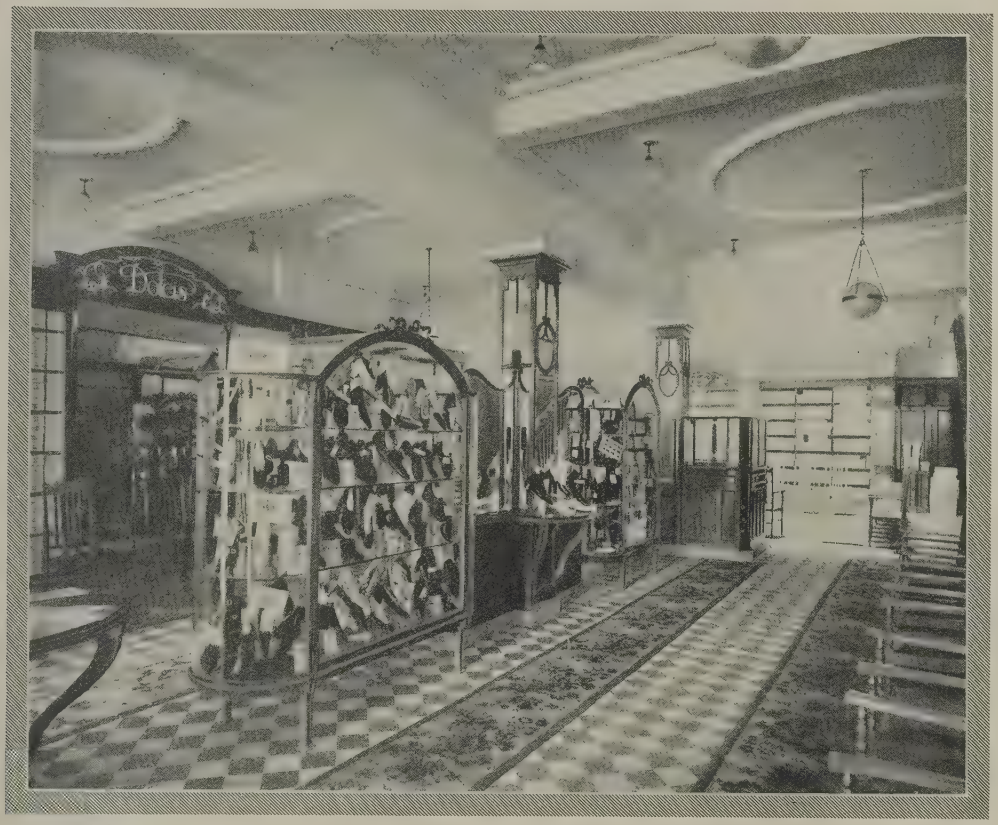
After goods are despatched, slips are taken to the office so that invoices may be despatched to customers. If between the forwarding room and

the invoice office certain departmental slips are lost, it will mean that customers receive goods which are not debited to their accounts.

Or again, the slips may reach the office, but after the invoice is made out and sent away the slips may be lost owing to carelessness—fallen off desk, etc.—or possibly, in the sorting, slips are dropped on the floor and are swept up at night along with scrap paper, etc.

for unless (*a*) the customer writes for an invoice ; or (*b*) upon receiving a statement he writes pointing out that a certain item (giving date and amount) "is not included on my account just received."

There is also another form of error which frequently occurs. In invoicing, a clerk extends an item as, say, £27 6s. 10d. which should be £37 6s. 10d., and the checker passes £27 6s. 10d. as correct. If the person receiving the goods



*By permission* *Messrs. Stanley Jones & Co., Ltd.*

An Example of the Use of Centre Cases to Form a Screen Between Departments

Now if goods are despatched and the departmental slips are lost in the packing-room, likely enough a customer will write asking for an invoice to be sent "in order to check off the goods," in which case the matter would be put right. But suppose a regular line of goods has been sent and the customer, although not receiving an invoice, is acquainted with the price and puts the goods into stock after taking a note of quantities, what would be the position ? Without some efficient check, goods would be sent out and not charged

does not point out the error a loss of £10 is incurred. Or, departmental slips are totalled up to £65 7s. 6d. instead of £165 7s. 6d., and this is passed by the checker, a big loss thus resulting unless the customer notifies the error.

## A Check System.

There are in use numerous check systems, one of which is the following. Every day each department must extend all items in its departmental slip book. On the morning of the 11th all the

previous day's entries will be extended and added in order to get out each day's trade. Assuming that B. department executed fifty orders, there would, of course, be entries for fifty customers and the value sent to each customer would be shown—

| | £ | s. | d. |
|---|---|---|---|
| Blank & Co., Bury . . | 9 | 7 | 6 |
| J. Brown, Main Street, Nelson . | 4 | 2 | 6 |
| Craven & Co., Shipley . . | 1 | 9 | 7 |
| Etc. Etc. | | | |

As a precaution against goods being sent and not charged—owing to lost slips or incorrect extensions—the slips, after being dealt with in the office, are sorted into their respective departments and returned to the section to which they belong.

Continuing with B. department we will assume that on 10th Jan., there were 37 entries ; these slips would be passed back to B. department showing, of course, the amount invoiced to each customer. The B. department assistant responsible for this work would check the slips with the departmental extension to see that the amounts agreed, and in case of a missing slip or a difference being shown between the departmental extension and the sum shown on the slip received back from the office, the assistant would take a note and report this and any other errors. For instance, the entry in the department book for Brown of Nelson is £4 2s. 6d., but the amount shown on the slip and as invoiced to the customer is £4 0s. 6d. only. In addition there are two slips missing, only 35 being returned against 37 shown by the department. From this it must not be assumed that two slips are actually lost ; possibly these are entries to make up part of an order which is not quite complete, and the goods may not be despatched for a day or two. However, Brown's item has been adjusted—the department extension being at fault—and the 34 slips returned by the office agree with the departmental figures. The 34 department book entries are then crossed through—leaving the two entries for 10th January still to clear. Seven days are given by the department for slips to be returned and any not to hand after 7 days are reported to the office for investigation.

## Flaws in the System.

This method of checking would be quite satisfactory if one could safely rely upon the department assistants doing their work properly. Unfortunately, however, there is a tendency for assistants, in case a slip cannot be found, to cross through the entry under the impression that the slip has been received in the department and mislaid ; or it is thought too much trouble to make enquiries. This work of checking sales entries should, in the writer's opinion, be carried out by the office, and not allotted to the department assistants, who, it will frequently be found, are inclined to be rather lax in doing clerical work.

## A Satisfactory System.

A system which the writer has found very satisfactory, and one which might be termed "fool-proof," is carried out in the following manner.

In every department a different slip book is used for each day's entries, the reason being that these departmental books are required in the office for checking purposes as will be explained. Books are numbered 1, 2, 3, 4, 5, 6, respectively, Monday to Saturday. Every slip made out through the departmental slip book must be headed by the number of the book—whichever may be in use—and the number of the entry as $\frac{2}{357}$. This means Tuesday's book, order number 357. For instance, the entry commencing the month starts No. 1, and if the 1st of the month is on a Wednesday, the number would read $\frac{3}{1}$ (Wednesday's book No. 1).

All orders executed as written up in the departmental book follow in numerical order, so that on, say, 11th January, Buttons department, using Thursday's book No. 4, makes entries for that from $\frac{4}{313}$ to $\frac{4}{356}$ representing 44 entries. The same system of marking is, of course, carried out by every department, and to make the sorting of slips in the invoice office an easy task, rubber stamps are used by each department to record at the top of each the department which is clearing—

BUTTS.
4
No. 356.

It has already been mentioned that the departments require a separate entry book for each day, the reason for this being that the office can at any time have the use of the department books

BUTTS.
4
No. 313. *J. Blank & Co., Bury.*

£7 6 3

BUTTS.
4
No. 314. *J. Smith & Co., Bacup.*

£2 1 9

(except the one required for the current day) for checking purposes.

Every department is responsible for extending its own sales entries.

Take Buttons department, just referred to, which has a total of 44 entries for 11th January; the following morning, 12th January, these entries must be extended and the total of each slip shown in the department book (*see* p. 318).

When the office section is ready to commence the checking of slips against the departmental records, the books required are obtained, and each department's slips are sorted in numerical order. In the case of the 44 entries just mentioned, the slips are sorted from 313 to 356, and one will realize that the amounts, if correct according to the department figures, can be checked off in a few minutes. A small memo. book is used in the office, for each department, in order to take a record of any slip or slips not cleared. For instance the office may not have slips numbered 326 and 329. Very likely these slips refer to goods still in the packing-room—possibly waiting for completion. Whatever the cause may be, however, the office simply records in the Buttons department book, the date of missing slips and numbers—

January 11th, 1923 . . . 326
January 11th, 1923 . . . 329

Possibly these numbers may come through with the following day's slips, in which case the date and number is struck through in the book, and against each line is placed the date cleared and the initials of the checker. Also every slip in the department book which is passed as being correct, must be initialed and not simply struck through. The initialing in the slip book fixes the responsibility.

The system as briefly outlined will be found very satisfactory and if properly carried out will make it practically impossible for any goods to be despatched without being charged up. In addition, seeing that the office and department figures must agree, there is no danger of a customer being charged a less amount than the correct sum.

## CHAPTER XIII

## CREATING A DEMAND

A MANUFACTURER, in putting a new line on the market, usually finds that it takes a very long time to get the line even fairly well established. A large amount of money may be spent on advertising, his travellers will call on the wholesale houses with considerable frequency, and yet the net results are very unsatisfactory; the time and money spent in order to obtain even a moderate trade are somewhat costly.

Many of the manufacturer's other lines which have possibly been on the market for years, he has nothing to complain about, as his returns are showing a gradual increase year by year.

The reason for the rather poor reception which a new article receives from the wholesale trade is that it seeks to compete with old-established lines, the names of many of which are household words. Let travellers be never so eloquent as to the virtues and wonderful merits of a new line, there will probably be a very lengthy period before the manufacturer secures anything like a sound footing amongst the wholesale houses.

### Appealing Direct to the Retailer.

One might say: "Very well, then, if the wholesale will not support me, I will go to the retail direct." To a manufacturer with a limited capital such action would be, to say the least, very risky. Instead of doing business with a few wholesale houses and securing payments regularly each month, he would have to open hundreds of small accounts, and his expenses in making collections would be enormously increased. For one thing, he would require a bigger office staff, a despatch room to make up hundreds of small parcels, heavier costs for carriages and postal expenses, bigger risks of bad debts; in fact, although the price he would receive from the retailers must obviously be higher than the prices quoted to the wholesale houses, the extra expense incurred in dealing with such a larger number of accounts would be greater by far than the amount received in higher profits.

### Appealing to the Wholesaler.

The small manufacturer will undoubtedly be in a safer and stronger position by going to the wholesale houses. If the wholesaler will not take up a manufacturer's goods, the manufacturer must create a demand—a demand by the retailer that he requires such goods and unless his wholesaler will supply him, he must go to a wholesale house that will.

Blank & Co., manufacturers, Birmingham, found themselves in the position of turning out an excellent article, which in their opinion compared favourably with any similarly priced line on the market. Blank's travellers for the first journey showed very poor results. Many of the wholesale people would not even consider this new line. "We have carried Messrs. . . . & Co.'s goods (mentioning a well-known firm which spends thousands a year on advertising) for many years," said one wholesaler's buyer. "Further," he went on, "these people keep their name or trade mark continuously before the public eye, and there is, in consequence, a very strong demand for their speciality."

"Your article certainly appeals to me," said another buyer. "In fact of the two I am inclined to say yours is the better made and more serviceable. But"—he shook his head—"I cannot

buy, as one in my position has to remember that it is what the public wants, although it may not always be the best, that must be supplied."

As no very considerable improvement was effected during the next few months, a meeting was arranged between the management and their travellers to discuss what should be done in order to improve the sales of this new speciality. Advertising on a big scale was out of the question, as the firm's finances could not stand any substantial depletion of funds unless there was an immediate response in increased sales, which, it was agreed, was not very probable. The firm's representatives were not hopeful of "getting in" with the wholesale houses owing to most of them purchasing well-known brands which they had been running for years. After considerable discussion it was decided that one representative should specialize with this new line for six months as an experiment, calling on the retailers only and using every endeavour to convince traders that Blank's article is as good as if not better than the old-established makes.

The idea was not to sell direct to the retail trade, as such a procedure would, of course, have jeopardized Blank's trade with the wholesaler in connection with other lines manufactured by him.

When an order was received the retailer was asked to give the name of a wholesale house through which he would like the goods sent. It was pointed out by Blank's representative that the trader would be put to no trouble, as Blank's would send the order through to the wholesale house named, and that immediate delivery could be effected. One of Blank's order forms was made out by the travellers filling in the goods required and the name of the wholesale house, after which it was signed by the retailer.

**ORDER FORM**

J. Blank & Company, Limited,
Birmingham.

---

*25th October*, 192_.

Order received from—
*Messrs. J. Jones & Co.,*
*Drapers,*
*Main Street,*
*Leamington.*

| | | |
|---|---|---|
| ¼ *dozen* | 13 *Natural* | 32/6*d.* |
| ½ „ | 21 *Extra S.* | 38/9*d.* |

Please forward through—
*Messrs. J. Rotherham & Co.,*
*London.*

(Signed) *J. Jones & Co.*
*A. E. Hesketh.*

TRAV.:
*Tom Brown.*

Occasionally, and at the traveller's discretion, an offer was made to a retailer (in order to induce him to take up Blank's speciality) to pay part of the expenses of an advertisement in a local paper.

As orders were received, Blank's representative sent them to his firm each night, with a general report giving particulars of the line which the retailer was running in competition with Blank's. The wholesale houses were written to with each order form sent to them, and a request made that Mr. . . . . would like to receive the goods ordered with the next parcel sent to him.

It was also stated that "these goods will be sent to you carriage paid and invoiced less the usual . . . per cent discount allowed to wholesalers."

## The Wholesaler's Position.

A request to the wholesaler to send certain lines although not stocked by him could not very well be refused. To write his customer stating that he did not keep the goods ordered, but that he would be very pleased to forward another make would be risky, seeing that if he declined to execute the order, another wholesale house probably would. Further, the declining to execute would in all probability be the means of losing other trade to the wholesale house sending these goods. An inducement to the wholesaler to send the goods was that he was put to no expense whatever in dealing with this trade, in view of the fact that he received a clear 15 per cent or 17½ per cent on every transaction. All that it was necessary for him to do was to invoice up the goods to the retailer. There was no necessity for him to stock the line, seeing that Blank only forwarded the goods exactly as required for each order.

## Forcing the Wholesaler's Hand.

Blank's representative for this speciality continued to send to his firm orders taken from the retailers, and these were all executed through the wholesale houses.

The regularity with which the wholesalers received these orders could not but be noticed by the buyer of the department, but even so, it was not yet sufficient to induce him to stock Blank's goods.

What eventually brought this about was that repeat orders were received from retailers for these goods, not only through the post and from their own travellers, but from those customers coming into the house to purchase other lines and asking for Blank's speciality in addition. These latter, when informed that the new line was not stocked, would express disappointment, and even annoyance, pointing out that they had received deliveries in the past, and that if they could not have them sent by return when required, they would have to order from another

wholesale house which could execute orders more promptly. Such a line of argument could not but make a strong impression on the buyer, forcing him in protection of his returns to take up a line for which there was apparently a constant demand.

This is what occurred in Blank's case, and before the end of twelve months most of the principal wholesale houses had taken up this firm's new speciality.

CHAPTER XIV

## HOW TO KEEP STATIONERY STOCKS

THE stationery cost to any business house over a twelve months period is invariably very heavy. It is therefore essential, if any economy is to be effected in this connection, that there should not only be a proper control over the purchasing side,

*Photo* *Kealeys, Ltd.*

CORNER OF GENERAL OFFICE
(Messrs. Wrigleys, Ltd.)

The same methods could be carried out, not only by those manufacturers starting a new line, but also by any house experiencing a declining trade with the wholesaler. If Brown, a manufacturer, found that his returns with certain wholesale houses were going down, it would be fairly obvious that these wholesalers were purchasing a similar line elsewhere. A manufacturer could not afford to sit still and watch his dwindling returns without making a serious effort to check this decline in trade. A thoroughly mapped out programme of working the retail trade on the lines indicated could not, the writer feels convinced, fail to bring about improved results.

but that some method of checking supplies should be instituted in order to prevent unnecessary wastage.

It is a somewhat surprising thing that in using stationery there is, on the part of some assistants, an inclination to treat printed forms, envelopes, etc., as articles of absolutely no value. At least, one could only come to this conclusion after seeing envelopes partly addressed, invoice forms perhaps commenced with a wrong date, a slight error on a statement form, all thrown into the waste paper basket as useless, no attempt having been made to alter neatly to a correct date or amend the error made.

Some houses are to blame in allowing assistants to use stationery and stationery requisites *ad lib.* The consequence is that, often enough, a pencil which should, with proper use, see many more days' service, is thrown away and a new one taken to replace it; or a clerk doing an extension will simply use an invoice or memo. form to work out a calculation, after which it is thrown away.

## Stationery Clerk.

In order to cut down the stationery cost to the lowest possible point, without in any way restricting efficiency, it is often advisable to appoint an assistant to the extra duty of stationery clerk. He is made responsible for keeping the stationery stock and for seeing that proper distribution is made to the whole of the house. He will also do the purchasing, if necessary, but only on the authority of one of the principals to whom he submits samples and prices of all lines required. The writer recommends a stationery section from which each department, workroom, office, packing-room, gets its supplies, as against the method adopted in many houses of allowing each department to cater for its own requirements.

## Central Stationery Office.

Jones Bros., running eight departments, workroom, office, and despatching section, allow each department to purchase its own supplies from one central office. Haberdashery Department requires black-lead pencils: a slip is made out with date and quantity required. This is handed to the stationery clerk, who, after handing over the pencils required, files the departmental slip.

At the end of each week the stationery clerk sorts out these slips in departmental order and enters in a memo. book the amounts only—no particulars being required, as these are recorded on the slips—to the debit of the departments concerned, and at the end of each month the head of every section is informed of the cost of stationery supplied, and in case there should be any dispute, the slips (which have been sorted in departmental order) are produced for inspection.

## Departmental Requirements.

Department assistants are not permitted to come down for stationery at any time it might suit them, as this would certainly hinder the stationery clerk with his other duties. It should be the rule that stationery supplied will be handed out each morning between 9 and 9.15 only.

It will be found that the monthly charging up of stationery to the departments will bring more forcibly before the notice of each buyer the cost of his stationery requisites, and be the means of a closer watch being kept in order to prevent wastage. The buyer himself, or, if not convenient, someone appointed by him, should take charge of all stationery; and this would be given to assistants as applied for, instead of allowing them to help themselves.

In fact, it would be essential for the one responsible in each department for attending to the stationery requirements for its section, to require a reasonable explanation from each assistant before giving out an ink-pot, pen, paper clip, file, or, in fact, anything of a nature that should last a considerable period, as to what had become of the one previously used. When supplies may be had just for the asking, pencils which might be used for a considerable time longer are scrapped, or other items mislaid are considered lost, and fresh ones got in their place.

Some buyers may express a desire to order their own stationery supplies, as there may be divergent views as to which may be, say, the most suitable kind of order book. There is no reason why the whole matter should not be fully discussed by departmental heads, and a uniform book or whatever may be required should be adopted for all.

## Future Requirements.

Further, in order that supplies may be ordered in bulk, it might be advisable to request the heads of each section to inform the stationery buyer as to their requirements for twelve months ahead. By doing so, goods could be ordered in bulk instead of piecemeal, so that the prices charged would be considerably reduced. Each department would use so many duplicate order books, post cards, memorandum forms, etc., and the stationery department could order sufficient supplies to cover requirements for a stated period.

## The Office.

In the office, where, of course, the stationery used is considerable, a rule should be made that the strictest economy must be exercised in regard to the use of all stationery, and it would be the cashier's duty to see that such instructions were carefully observed by the whole of the office staff.

The stationery clerk should be able at any time to put his hand on any particular book or forms required, and in addition should be able to ascertain in a few minutes the quantities of stocks held. It is essential that stocks should not be allowed to get too low, otherwise much inconvenience is likely to be caused.

## A Simple System.

A very simple method of keeping the stationery stock is to arrange numbered fixtures in which stocks may be kept—memorandums in Fixture 1, invoice forms in Fixture 2, and so on. In order to keep a proper check on stationery in hand and on new purchases, there would also be required a stationery stock book. This might be an indexed book, or, better still, a small card index could be used. A card drawer is preferable to a

book as no index would be required, the particular kind of stationery listed being noted on the tab at the top of the guide cards, thus—

INVOICES

MEMOS

CREDITS

On the invoice record card there is shown the stock on a certain date. On every occasion when the stock is depleted, the record card is marked accordingly on the right-hand side of the card. Fresh supplies are entered on the left-hand side, before being put away into the fixtures.

By this method one is always in the position of knowing at any time the quantity held of any particular stock. Further, by marking the stationery record card with the quantity ordered, name of firm from whom purchased, and date, it is easy to ascertain the number of any particular forms used for any period.

The additional time taken in dealing with stationery requisites in the manner indicated, will be more than counterbalanced by the considerable saving effected. The system also fully ensures that each section is properly charged and bears its own share of the stationery cost.

## CHAPTER XV

## CORRESPONDENCE AND THE FOLLOW-UP SYSTEM

In writing business letters, it is advisable to keep certain principles in mind if one is desirous of obtaining the most satisfactory results.

One is that the appearance of the letter form should be attractive, as the cordial reception of a communication is often decided by the first impression given to the recipient.

A good letter head is necessary, and a good quality of paper should be used. Let the typewritten matter be neat and clear; nothing looks so slovenly as indifferent type, and it is essential that the typewriting ribbon be reasonably bright.

In dictating a letter, it is advisable to avoid indefiniteness. It certainly must cause irritation to a customer who receives a letter which does not properly answer a question that has been put, or which, in making an offer does not make clear its own proposition. A letter should be courteously phrased, without beating about the bush; short sentences, brief and direct to the point, are to be preferred to lengthy and glowing paragraphs.

A skilful letter-writer can, and frequently does, introduce in his communications a distinctive personal magnetism which sometimes makes all the difference between getting an order and having the proposition turned down.

A suitable size for a business letter is a sheet about 8 by 10½ in. In order to ensure neatness in the get-up of each letter, the form below might be adopted in showing the position of date, name, and address, salutation, etc., and the space to be occupied by the typewritten matter, giving a fairly uniform margin on both sides of the paper.

TELEGRAMS: "BUTTONS" MANCHESTER.
TELEPHONE NO.: CITY 2485.

J. BLANK & CO., LTD.
WHOLESALE WAREHOUSEMEN.
19 Church Street,
MANCHESTER
(*Date*)

(Also at St. Paul's Churchyard, London, E.C.4)

*Messrs. J. Smith & Co., Ltd.,*

Dear Sirs,

(BODY OF LETTER.)

Yours faithfully,
J. BLANK & CO., LTD.
J. BLANK,
Director.

Letters should be written on one side of the sheet only, and a copy should be kept of every communication that is sent out. Copy letter books are not always satisfactory, and a good carbon copy is much to be preferred. These carbon copies may be treated in the same way for reference as would be the case if a copy letter book were in use; that is, filed in numerical order and indexed. A better method, in many cases, is to attach the carbon copies to the follow-up matter until the transaction is completed.

The writing of good letters is such an important subject that it is dealt with in a separate Section (*see* Section 17, LETTER WRITING FOR THE BUSINESS MAN), to which reference should be made.

### Follow-up System.

Whatever length of time may be taken up by correspondence with another house, it should always be possible to turn up immediately the whole of the letters required.

A follow-up system which might be found very suitable to many trades is run on the following lines. A diary or office "tickler" is necessary as a follow-up, and one of these may be purchased from any good class stationer selling system requisites.

These diaries are made of wood, about 12 in. by 9 in., and contain guide cards, 1 to 31, for the days of the months, and twelve guide cards, one for each month of the year. The follow-up card is

placed in *front* of the card of the date on which it is intended to deal with any matter.

Suppose an enquiry comes along on 1st September from Mr. John Blank, Birmingham, asking for prices of a certain line, or possibly a general catalogue is required. Particulars are forwarded the same day, along with a general letter in which a request is made for references, and, in addition, terms are stated. The follow-up card is made out as follows—

**FOLLOW-UP CARD**

*Mr. John Blank,*
*42 Main Street,*
*Birmingham.*

---

*L.B.* *Catalogue sent. Sept. 1/22* *No. 1* (22)

*Advised Trav. to call* 12/9/22 (3)

*A/c. opened* 27/9/22

If no reply is received in about ten days' time, a second letter is sent, say, on 12th September (the follow-up date), in which is stated that: "We trust the samples submitted to your esteemed enquiry, dated 31st August, were suitable for your requirements. If not exactly what you want, please let us hear from you, when we shall at once submit further samples"; or the traveller, Jones, who works the Birmingham ground, is down on the journey list to hold a three days' stock-room at a Birmingham hotel on 18th, 19th, and 20th September. A letter is sent in which Mr. Blank is informed of the traveller's intended visit, and, in a reference to the samples already forwarded, he would be advised that: "Our Mr. Jones, who works Birmingham, will be showing a full range of samples at the Swan Hotel in your town"—giving dates—"and we should be pleased if you could make it convenient to give him a call." The traveller is given particulars of what has been done, and should Mr. Blank not put in an appearance, Jones or his assistant will call on him with additional samples. Should the account be opened, the traveller, when sending the order to the house, will forward the usual trade references. If no order is obtained, a full report must be sent in, so that, if necessary, the matter may be further dealt with.

When an enquiry is transferred to a representative on the ground, the follow-up would be placed in the "tickler" on a date, say, two days after the traveller's visit, and if a report were not forthcoming, the traveller would be written to.

Should, however, the account be opened, the whole of the correspondence would be taken from the "tickler" and filed away.

Correspondence running over a period is inclined to get rather bulky, so that it would be impossible to attach all the letters to a follow-up card. It has been found very useful to use in conjunction with the office "tickler," a box file with alphabetical index in order to keep letters and copy replies, only the follow-up card being placed in the "tickler." In the event of the correspondence growing considerably, a number of these files may be used to ensure quick reference, but in such a case the files will be subdivided alphabetically in the same way as one's ledgers or card cabinets.

If four files are in use, a good division might be: A to G; H to N; O to S; T to Z; and the outside of each box file is marked accordingly. The follow-up card will, of course, ensure that no matter which is in hand is neglected, seeing that the reminder card comes up automatically on the date required.

Before each letter is placed in the file the follow-up date should be filled in on the left-hand corner, so that when another communication comes along, for which a further reply may be necessary, the follow-up card can be taken out of the "tickler" and the date of the reply letter recorded, after which the follow-up is replaced at whatever date it is desired the matter should again come up for consideration.

## Replying to Customers' Letters.

It is always preferable to avoid as far as possible the "cut and dried" method in replying to communications. There are, of course, instances where form letters do answer very well, but with firms with whom one is desirous of opening an account it is most advisable that a personally dictated communication be sent.

Many good accounts have been lost to a house solely owing to the fact that replies sent to customers were couched in too curt a tone.

This usually occurs in the departments of a house where, possibly, supervision over correspondence is not exercised to the same extent as is the case in a counting-house. There is no disputing the fact that letters sent from departments in reply to customers' enquiries, complaints, etc., are not dealt with so efficiently as would be the case if the replies were sent by the office. Seeing that it is on the selling end that a business depends mainly for its success, one would think the correspondence sent out from departments would be of a high standard, and of such a nature as to influence favourably a prospective buyer.

Instead of this, the average departmental letter merely replies briefly to the questions asked, is often enough very curtly worded, and is finished off without any signature, only the departmental letter usually being filled in.

A customer receiving such an epistle must occasionally feel that his orders are not considered of much importance by this firm.

There is no doubt that many orders are lost by

the indifference shown by departmental assistants in replying to customers' letters. In order to prevent this it is recommended that the department buyer, or, in his absence, his first man, be made responsible for all communications which leave his department, and for seeing that each letter is properly signed. Proper supervision by the buyer over the whole of the correspondence of his department, is sure to bring about an increase in trade, provided that a satisfactory follow-up system is maintained. A follow-up system in a department, however, is very unusual, except when an enquiry is received for quotation of big quantities; then as it comes direct to the buyer, he is naturally keen upon securing the order.

The smaller enquiries are invariably left to be dealt with by any assistant into whose section such may fall. A brief reply, giving the necessary quotations, is forwarded, and the matter is ended so far as this assistant is concerned. If an order is received, well and good; but in case no reply comes to hand, the matter is allowed to drop.

Hence the suggestion that a buyer should see and instruct an assistant to deal with each enquiry in the manner he deems most desirable; and, further, that each matter be followed up until an order is secured, either by personally dictated letter, or by co-operation with the firm's representative on the ground from which the enquiry has been received.

Follow-up letters are successful if the writer will bear in mind that the appeal made must be from the standpoint of the reader, and when they advance further and stronger arguments for immediate and favourable decision concerning the proposition of preceding communications.

*By permission* *The United Yeast Co., Ltd.*

A Compact and Well-Lighted Office

## CHAPTER XVI

## SAVING ON POSTAGES

The small trader is perhaps not so keen upon effecting economies in his business, as is the case with the bigger houses, where the cutting down of

expenses is carried out most energetically. In fact, some of the large concerns employ a man whose sole work is that of devising schemes in connection with all parts of the business in order to reduce expenses.

Any business, however small, may, without incurring any additional labour, cut down postal expenses to the lowest possible point.

## Invoices.

For instance, invoices can be sent through the post for ½d. postage, subject, of course, to only particulars being given of quantities, numbers, prices, etc. If, in addition to these particulars, there is given an explanation as to the lines invoiced, or any remark whatever in the nature of a letter, 1½d. postage will have to be paid. To avoid paying this higher rate of postage, it is only necessary to find out the kind of remark or remarks which are generally used on customers' invoices, and to purchase rubber stamps with the remark; of course considerably curtailed.

It will no doubt often happen that one is unable to execute an order exactly as received, so goods are sent to substitute. This, of course, is frequently done, especially when the substitute is almost identical to the line required; and, naturally, in such a case the customer is quite likely to return the goods if unsuitable. A remark giving an explanation at the foot of invoice, or a letter accompanying the invoice would increase the ½d. (invoice) postage to 1½d. Instead of a remark, however, a rubber stamp with the words—

"Nearest we can do; hope goods will suit"

against the line invoiced is all that is necessary, and conveys exactly the same interpretation as would a letter giving a fuller explanation.

Often enough, one is unable to send the whole of an order immediately and can send only part. Here again, a rubber stamp answers the purpose very well in acquainting a customer of this fact and stating when the balance of order may be expected, as shown—

"Remainder to follow in ..... .. days"

which saves any lengthy explanation and also reduces postage.

Further stamps which might be used to advantage are—

"Regret being unable to do. Hope to send..."

and where alteration has been made in prices—and prices nowadays vary considerably week by week—the following stamp—

"Please note to-day's price"

against such a line might very conveniently be used.

Of course, a trader would naturally be able to arrange his stamp remarks in accordance with his particular business. There is no doubt that a considerable saving may be effected by working on the method suggested.

Similarly, in sending out statements it is customary to mark at the foot of the total amount shown, the terms and date upon which the account falls due. Rubber stamps may be used to reduce the postal expenditure, enabling these communications to be sent for ½d. instead of 1½d. For instance—

"2½% allowed if paid by end of present month"

or—

"3½% allowed if paid by 10th instant"

or whatever terms may have been arranged.

One might argue that terms may be stated at the top of the statement form as is done by some houses, but if terms are clearly stated in bold type against the amount, there is less chance of a customer making the excuse that he was not quite sure of the terms, and endeavouring to obtain at a later date, a discount to which he is not entitled.

Most firms, in ordering, send the usual letter form, which is either copied or entered through a duplicate slip book, so that goods may be checked against invoice received, and also to see that the lines received are in agreement with those ordered.

Such letter would require to be sent by 1½d. post, but here again a saving of 1d. may be effected if each order is sent on a printed form similar to the one shown below—

**ORDER FORM**

Name _____

Address _____

_____

Conveyance _____

_____

_____

PLEASE NOTE.—To take advantage of the cheaper postage, write *your order only*, with Name, Address, and Conveyance. Do not use any "courtesy remarks," otherwise letter-rate will be charged.

Prices, quantities, lengths, weights, in fact, everything appertaining to the goods ordered, may be filled in, and in order to be able to do this, instead of writing in the form of a letter, the form is printed with blank spaces for the details to be inserted. A trader doing an active business with a number of houses may effect a very considerable saving by using a form similar to the above when "ordering up."

## Sending Goods Through the Post.

Those traders doing a mail order business and sending out a lot of parcels, may effect a considerable saving by sending an invoice with each parcel instead of forwarding separately through the post.

As departmental slips arrived in the despatch room with the goods, the clerk dealing with them will decide according to the weight of each parcel when made up, as to whether or not it will be sent by post or otherwise ; or possibly the customer's instructions may be "send by parcel post." If sent parcel post, the despatch clerk stamps the slip before being passed to the invoice office. The invoices, when made out, are sent down to the despatch room, pinned to the departmental slips, so that postage may be added and charged. The parcel is weighed and marked with the amount of postage required, which sum is added to the invoice and also marked on the slip ready to be dealt with by the Day Book clerk.

The invoice is not put inside the parcel—that already having been made up—but is put inside the tag envelope (addressed) which is attached to each parcel by the despatch clerk. An envelope similar to the one shown can be used, and no restrictions are necessary as to remarks which may be made on invoice. Consequently, a matter of 1½d. postage is frequently saved on many invoices which are sent to customers in this manner.

**INVOICE ENCLOSED.**

**PER PARCEL POST**

O M_____

_____

_____

**From JOHN BLANK & Co., Ltd.**
**MANCHESTER**

## Enclosing Invoice with Acknowledgment of Order.

Another opportunity of cutting down expenses is in dealing with the orders received through the post which are accompanied by a remittance. Postage will have to be paid in acknowledging a payment, but why should not the invoice for the goods ordered be sent with the receipt, so incurring one postage only ? The system by which this may be carried out is simple and incurs no additional labour. On opening each letter which contains both an order and a remittance, the order after being approved is stamped with the word "Office," which signifies that there will be an office enclosure to go with the invoice. The departmental slip is marked accordingly, so that the invoice clerk, when making out the invoice, can see that an enclosure is to be sent.

The receipt is stamped with the letters "In," signifying that an invoice will be going, and such receipts are passed to the invoice clerk to be dealt with.

## Statements.

When sending out statements monthly, as in many businesses, possibly a half to three-quarters of a firm's accounts will require statements ; it naturally follows that quite a big batch of invoices will be going to many of these customers. A sorting postal file or cabinet, alphabetically arranged, will be found very useful in preventing more than one envelope being despatched to each customer.

After the statements are addressed they can be sorted and filed in their proper order.

The invoices or any other communications will also be addressed and sorted in the post file.

When the post is completed and envelopes are ready for stamping, the post clerk will go through each section, and where two or more envelopes have been addressed to the one customer, these will be thrown out and the enclosures put in one envelope. This may easily be carried out by a little extra trouble, but such additional work, however, is more than justified by the economy effected.

CHAPTER XVII

# MAKING THE MOST OF THE ADDRESS BOOK

THE Address Book in a business house is probably handled more than any other book that can be mentioned, the consequence being that, owing to its very often dilapidated condition, it is, at times, almost impossible to read clearly some of the names and addresses.

When a name has to be taken out, say owing to a customer giving up business, it is struck through in ink, and this being repeated on every similar

**ADDRESS CARD**

Name__*F. Jones & Co.*_____ *Ref. No.* 2643.
Address____*Main Street,*____ *Credit* £80/100.
Town_____*Macclesfield.* ____ *Must pay for discount a/c opened May/22.*

| Date of Orders. | Traveller's Report. |
|---|---|
| 192_ | *May* 29/2_ |
| *May* 22. *Hosy. Gloves.* | *Doing a good class trade, good position. Stocks well kept.* |
| *June* 6. *Trmgs. Gloves.* | |
| *Aug.* 10. *Milly. Hosiery.* | |
| *Oct.* 17. *Gloves, Hosy.* | *Mr. F. Jones does all buying.* |

occasion, an Address Book gets into such an unsatisfactory state that the writing up of a new book becomes necessary.

The most satisfactory method of keeping customers' addresses is by recording on cards and filing in cabinets, in alphabetical order of either names or towns, whichever may be the more advisable. The size, 6 in. by 4 in., will be found very useful.

come along a card is made out for each and filed in proper order in the cabinet. When the system is worked under names, the subdivisions can be so arranged that any name may be turned up in a few seconds, which would be impossible in using a bound book.

Again, take the varied uses to which the address card cabinet may be put. For one thing, a record may be taken of sales to customers, the lines

*By permission* *Libraco, Ltd.*

A Small General Office
showing standing desks

This system will be found very suitable for the retailer, and to the mail order trader it is invaluable.

Assume that a catalogue or booklet is required to be got out at short notice; only one assistant could use the bound book in addressing envelopes, but with the card system in use any number could be put on this work. The card system is not allowed to get out of date; if a catalogue is returned marked "Gone, no address," the card is taken out of the cabinet. As any new customers bought, and the date of every purchase. Mrs. Jones writes: "I bought from you in November last a special line in . . , I should be glad if you could let me have a similar quantity but in a darker shade." Such a request would perhaps be somewhat difficult to deal with, but by referring to Mrs. Jones's card, the item giving quality, number, and date would be found, and the execution of the present order simplified.

Or Blank & Co., retailers, wish to classify their

customers under three different heads for cataloguing purposes. It is quite simple. All that is necessary is to use different coloured cards, say white, green, and pink, which would represent No. 1, 2, or 3 catalogue. If a credit trade is done by Blank, reference could be recorded on the address card, along with any other information that it might be found necessary to add.

## Wholesaler or Manufacturer.

For the wholesaler or manufacturer it would perhaps be more satisfactory to compile the address cabinet in alphabetical order under towns or districts. This system would enable one to send advices of a traveller's visit covering part of his ground. For cutting down catalogue expenses, the colour scheme would be found most useful.

Take a wholesale house with perhaps a number of departments. Some of the customers may purchase millinery only; others haberdashery, and so on; so that, to send a general catalogue to every customer on this wholesaler's books would be a needless expense. The customers would be classified under the lines purchased, so that catalogues would be sent only of those lines which a customer stocked.

Again, it is no uncommon practice for a wholesale house to announce a sale of season's goods which may be represented in one department only. We will assume, for instance, that the blouse department, having new season's goods, wishes to circularize those customers buying only such goods. These customers would be represented by, say, a yellow address card, so that envelopes or wrappers could easily be addressed to the names given on those cards.

## Customers' Instructions.

Another use is by recording on each card, customers' instructions *re* delivery of goods or special packing required. For instance, Brown, of Burnley, sends instructions that all his goods up to and not exceeding 20 lb. weight must be forwarded by Sutton or City Parcel Express, or whatever carrier he may have contracted with. Such instructions may have been sent to the despatch room at some time or other, but memory has to be relied upon, or slips may be pinned or gummed on the forwarding clerk's desk, with the result that goods are not always sent as requested, and, consequently, the customer refuses to pay carriage whenever a parcel is sent other than as ordered.

By having these instructions recorded on a customer's address card, such instructions can be filled in on the despatch card immediately after the order has been approved and passed on for dissection.

## Recording Travellers' Visits.

The wholesale house may also use these cards for recording travellers' visits. It is well known that a traveller will frequently call only on those customers from whom he is fairly certain to obtain an order, neglecting retailers whose premises may happen to be just out of the town. In fact, customers are frequently missed by a firm's representative, who is not called upon by the house to give any explanation, so long as his returns are kept up. Often enough a house has no check on the calls made by their representatives, but by recording these visits on a customer's address card as orders are received, the manager is enabled to go through any ground or section and find out those customers who have been neglected.

In working this system, the writer found that many customers were being missed by travellers, although orders might easily have been obtained, seeing that post orders were regularly received by the house.

A list of these accounts could be got out after each journey, and the representative instructed to give an explanation as to why a call had not been made. A more thorough and efficient working of each traveller's ground would be secured by following on the lines indicated.

## Checking a Fall in Trade.

A wholesale house might with advantage adopt the card address system, not only for securing quick reference to any address required, but in order to find immediately whenever a customer's trade is declining.

This is a very important matter to any business house, as a falling off in trade may not be noticed for months, except by accident.

A customer may have been annoyed by some action on the wholesaler's part; possibly a complaint has not received prompt attention, or perhaps full discount has not been allowed owing to the account being a little overdue. Whatever may be the cause, the customer feels that he has a grievance and gradually reduces his purchases.

This can be closely watched each month by using the back of a customer's address card to record the trade done month by month.

On p. 330 is given a sample of a suitable ruling, so that the explanation of the working of the system made may be more easily followed.

To carry out this scheme successfully, it would be necessary that the address cabinet should run in exactly the same order as the Ledger card cabinet. Assuming that C to G Ledger Account cabinet contained customers' names under towns from C to G, the address cabinet would be made up in exactly the same order; Brown, of Chester, $\frac{\text{Ches.}}{24}$ in the Ledger would be $\frac{\text{Ches.}}{24}$ in the address cabinet. The recording of a customer's trade would be done month by month by those clerks making out statements. It will be noticed that the form shown extends over a period of 10 years.

The clerk making out Brown's statement for, say, November, 1922, notices a big drop on the November, 1921, figures. This statement is thrown out, as also are all others in the same cabinet which show a decline in trade. Brown's case would appear to be a serious one, as this man, a fancy dealer doing largely a Christmas trade, had in the past been in the habit of making big purchases considerable that a trader should have no hesitation in adopting the more up-to-date method of recording customers' addresses.

The valuable uses to which such an address system may be put are innumerable. Only a few have been named, but many other useful schemes could be carried out to suit any particular business.

MONTHLY TRADE RECORD

*Ches.*
24 *J. Brown & Co.,*
*Main Street,*
*Chester.*

Terms : 3¾% 10*th following delivery.*

Special : *Buyers, Mr. F. Jones, Drapery ;*
*Mr. T. Wild, Fancies.*

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---|---|---|---|---|---|---|---|---|---|
| January | 32 | 28 | 39 | 40 | 32 | | | | | |
| February | 14 | 25 | 12 | 22 | 25 | | | | | |
| March | 29 | 38 | 42 | 38 | 42 | | | | | |
| April | 35 | 46 | 34 | 50 | 50 | | | | | |
| May | 120 | 98 | 78 | 90 | 78 | | | | | |
| June | 72 | 120 | 97 | 110 | 120 | | | | | |
| July | 63 | 72 | 82 | 87 | 63 | | | | | |
| August | 18 | 29 | 34 | 32 | 29 | | | | | |
| September | 22 | 34 | 26 | 25 | 26 | | | | | |
| October | 29 | 39 | 10 | 45 | 45 | | | | | |
| November | 67 | 82 | 90 | 16 | 90 | | | | | |
| December | 42 | 70 | 68 | 15 | 70 | | | | | |
| | 543 | 681 | 612 | 570 | 670 | | | | | |

during the month of November. The manager who takes these records month by month makes a close investigation of all those accounts where trade has shown a decline. Travellers on the ground are written to, given particulars, and asked if they have any explanation to offer. Each customer also is personally written to, the letters being signed by the manager, and the communication so worded that usually a reply is at once received. The matter being taken up quickly gives a firm a better chance of smoothing over any difficulty that may have arisen than would be the case if the matter were allowed to hang over for months.

Without some such system of keeping a watch on accounts, it would be practically impossible to discover whether a customer's trade was increasing or the reverse without going to a great deal of trouble in referring to Ledger cards for twelve months previously—which, it will be obvious, would be very arduous work.

### Advantages of Card Address Cabinet.

The advantages of a card address cabinet over the ordinary bound Address Book are so very

## CHAPTER XVIII

## SALESMANSHIP AND BONUS SCHEMES

How is it we so often find in a business house that certain assistants are often spoken of, when discussing the merits of the employees generally, as being splendid salesmen—that, in the event of important customers coming into the house, these assistants are invariably selected by a buyer to "forward" ? Or how is it that one traveller's returns always show an increasing trade, whereas others, on quite as good a ground—as may be judged by the total value of post orders received over any stated period—cannot show anything like the same satisfactory results ?

Put the first traveller on a fresh ground, and an improvement would be quickly seen, but reverse this by sending one of the others—a thoroughly experienced traveller—on the first ground, and the returns would soon show a shrinkage.

What is the something which one traveller possesses (and which enables him to bring about

such excellent results) which is lacking in others ? In the writer's opinion, it is the personal element, the intimate touch between salesman and prospective purchaser ; in other words, the ability quickly to recognize the characteristic qualities of the man to whom he is endeavouring to effect a sale.

One sometimes hears the expression " A Born Salesman," in referring to an exceptionally smart man, but it is open to anyone with average intelligence and the capacity to learn from the successful salesmen, by observing their methods and endeavouring to follow on the same lines, to become ultimately a " shining light."

## Bonus Scheme.

There is a good deal to be said for a scheme for salesmen which will bring about a desire on the part of all to put forth their best efforts ; such is the system of paying a salesman something over and above his salary, should special efficiency be attained. This has in many establishments been somewhat difficult to work, especially in the retail trade.

If payments are made on total figures, certain assistants in a department will have very little chance of making very much, seeing that the first salesman, or first and second salesmen, will get most of the " plums." To a certain extent the same difficulty prevails in the wholesale trade. As regards the outside man who is " on his own," the matter is simplified, and a scheme in which all a firm's representatives may have an equal chance may be adopted.

Big figures do not always represent good salesmanship. Your representative may work a section where there is not much competition, and where your goods have in the past been in good demand. A real test of salesmanship would be to change this man's ground to one where competition is keen, and from which returns have in the past been only very moderate. Another point is that the big figure salesman, either inside or on the road, is not always the most profitable to his firm. Travellers will frequently make their effort for big figures irrespective of the class of goods sold, so that often enough the more profitable departments get neglected. What is meant is that a representative will go strongly on the " bread and butter " or everyday lines, which show but a very moderate profit, and neglect the more profitable lines which require much more selling.

## A Typical Instance.

The writer had an instance of this when a representative named Brown came to him and tendered his resignation. Upon asking him his reason—he was in receipt of a good salary, but his figures were not so good as those of three other representatives—his reply was : " I'm the most profitable traveller to the house and yet my salary is below that of at least three other of your representatives." Upon going carefully into the whole matter, it was found that Brown, although doing a smaller trade than some of the others, showed on the whole of his working a bigger profit to the house. Brown did not lay himself out simply to do big figure deals by selling goods showing the smaller profits, but, what was more important to the house, he disposed of lines which required bigger efforts. Brown had the right idea of salesmanship, and the result of the interview was that the whole system of gauging a traveller's value to the house was altered.

Instead of simply judging on big figures only as to a salesman's capabilities, records of a traveller's figures for each department were taken out daily, and at the end of each month a calculation was made as to the net profit shown by each representative. In the case under notice, Brown came out well on top. The result of working on the new system found out a weakness which had long existed. Some of the travellers who had done big figures were not anything like so profitable as had been imagined. Lines showing small profits but good figures had been pushed to the detriment of those departments running specialities which had to show higher profits. After the first month's returns had been got out under the fresh system, those salesmen who had neglected the higher priced lines were written to, and it was pointed out to them that special efforts were to be made in selling goods for the more profitable departments.

## A Bonus Scheme for the Outside Man.

In dealing with the outside man, let us assume that a trader has four travellers, Brown, Clark, Jones, and Smith, and that their figures for January to June, 192_ are respectively, £10,000, £9,000, £8,000, and £7,000. It might be agreed to pay a bonus of, say, 4 per cent on all trade done during the year in excess of £9,500, £8,500, £7,500, £6,500, or the same percentage on all trade exceeding the previous year's figures. This may appear to be quite a sound scheme for a business house to adopt, but, as pointed out previously, it is quite possible that Smith, doing his £7,000 a year, is a more profitable man to the house than Brown, whose trade exceeds £10,000. In order to get out the figures for each department, a book or card ruled as shown on p. 332 should be used, in order to record day by day each traveller's figures against the departments for which orders have been received.

It will be seen that the trade done by the firm's representatives for Gloves Department for the month of February, totals up to £1,297 2s. 1d., of which amount the four travellers sent in orders to the value of £129 1s. 3d., £180 18s. 5d., £252 16s. 2d., £226 8s. 0d. The counting-house records in a like manner the returns for each of

the other departments, so that at the end of each half-year a summary may be made in the form shown below.

At the end of each six months, or whatever may be the stocktaking period, the full figures are got out and the traveller's total figures for each department are listed. The bonus paid is not on total figures but on the best results. This may be worked out by taking the percentage of profit which each department has to show, and from this deducting all expenses which have been incurred to obtain this trade, salary, expenses, commission, etc. By this method it is easy to ascertain, at any period that may be required, a traveller's value to the house he represents.

192___ GLOVES DEPARTMENT, TRAVELLERS' TRADE

| | Smith | | | Jones | | | Brown | | | Clarke | | | &c. | | &c. | | Totals | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | | | | | £ | s. | d. |
| Feby. 1 | 7 | 6 | 2 | 7 | 2 | 6 | 9 | 9 | 7 | 8 | 7 | 6 | | | | | 37 | 12 | 10 |
| 2 | 8 | 7 | 3 | 8 | 7 | 3 | 2 | 6 | 1 | 7 | 16 | 3 | | | | | 33 | 2 | 4 |
| 3 | 4 | 3 | 2 | 9 | 16 | 10 | 8 | 17 | 6 | 5 | 4 | 3 | | | | | 53 | 10 | 8 |
| 4 | 7 | 16 | 3 | 7 | 15 | 9 | 2 | 17 | 6 | 5 | 8 | 2 | | | | | 36 | 16 | 2 |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | |
| | 130 | 9 | 6 | 183 | 5 | 11 | 256 | 9 | 6 | 228 | 7 | 6 | | | | | 1314 | 16 | 2 |
| Deduct Crs. | 1 | 8 | 3 | 2 | 7 | 6 | 3 | 13 | 4 | 1 | 19 | 6 | | | | | 17 | 14 | 1 |
| | 129 | 1 | 3 | 180 | 18 | 5 | 252 | 16 | 2 | 226 | 8 | 0 | | | | | 1297 | 2 | 1 |

SUMMARY OF TRAVELLERS' FIGURES, 1st JANUARY TO 30th JUNE, 192__

| | Smith | | | Jones | | | Brown | | | Clarke | | | &c. | | &c. | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | £ | s. | d. | £ | s. | d. | £ | s. | d. | | | | | | | | £ | s. | d. |
| Butts. | 504 | 3 | 2 | | | | 614 | 3 | 2 | | | | | | | | | | |
| Cords | 314 | 9 | 6 | | | | 518 | 19 | 4 | | | | | | | | | | |
| Emby. | 104 | 6 | 3 | | | | 128 | 9 | 6 | | | | | | | | | | |
| Furs | 230 | 9 | 4 | | &c. | | 790 | 16 | 4 | | &c. | | | | | | | | |
| Gloves | 540 | 8 | 6 | | | | 1080 | 14 | 3 | | | | | | | | | | |
| Hosy. | | &c. | | | | | | &c. | | | | | | | | | | | |
| &c. | | &c. | | | | | | &c. | | | | | | | | | | | |
| &c. | | | | | | | | | | | | | | | | | | | |
| | 7108 | 6 | 4 | 801 | 6 | 2 | 11021 | 6 | 3 | 8901 | – | 6 | | | | | | | |

## Indoor Salesmen.

To arrange a satisfactory scheme for the inside salesman is not so easy. For one thing, a man may be engaged in a department which has to show a profit of 12½ per cent gross; another salesman is in a department selling specialities where a much higher percentage must be attained, possibly a profit of 35 per cent, and so on. To pay simply on figures would be inadvisable for this reason.

One department may have a run on certain lines owing to something which has "caught on," or for which for a period there may be a special demand. Such a department's figures would show a big increase even with indifferent salesmanship. The same thing might apply to other departments at another period. In the writer's opinion, good results would be brought about by offering a bonus to the three departments which showed the best results proportionately to the trade done, over a period of, say, six months. Assuming that the Mantle Department, during the six months ended 31st December, 192_, showed a total trade

(sales) of £16,000, and the Haberdashery Department returns for the same period were £8,000, it would mean that should haberdashery for the six months up to the following 31st December, do a trade of £8,700 against £17,100 by the Mantle Department, the Haberdashery Department average would be the better of the two.

The whole of the department figures would be worked out on this principle, and the three prizes—first, second, and third—would be paid to those department assistants showing the best results.

An announcement would be shown on the notice board declaring the results at the end of every period of six months. Such a system would be the means of inducing salesmen and saleswomen to put forth their best efforts to secure a prize for the ensuing half-yearly period.

### Another System.

Another system, and one which has been found very successful, is to pay only for individual efforts. In order to do this, it would be necessary to get out for a period of, say, three months, the average sale value in each department. Assuming that Gloves Department for October, November, and December, 1921, showed a 7s. 6d. average over this period, an offer would be made to pay a certain percentage to those assistants in the departments whose sale average exceeded, say, 7s. 9d., or whatever sum might be fixed, during the same months of the next year. Should the 7s. 9d. average not be exceeded, no bonus would, of course, be paid. Most departments, both wholesale and retail, take a record of the number of their sales day by day, so it would be an easy matter to arrive at the average sale value by dividing the number of sales into the total amount of sales for any period required.

Here is a strong incentive to assistants to make special efforts to effect the biggest possible sale on every occasion. One may argue that the payment of a satisfactory salary should be sufficient incentive, but long experience has proved that the "something extra" has a big pulling effect, and that the offer of an additional reward will invariably bring forth the greatest efforts. Further, it is thought that an offer of this sort will not only pay a firm for the extra outlay by the increased sales results, but will bring about in some of the assistants a greater keenness in their desire to do their utmost for the firm they are serving.

### Meetings with Management.

The best results will never be obtained from any selling force unless there is a controlling head who is continually enthusing his sales staff in every possible way, not only by giving them an incentive by a bonus offer, but also by entering into discussions with them as regards the difficulties they have to contend with from time to time. In order to do this effectively, there might be weekly or fortnightly meetings of the selling staff.

In the retail trade there must be many instances when a sale is not effected for some reason or other. Do the management ever have these reasons given to them? If not, what chance is there of effecting a sale on the next similar occasion? Why not arrange with every salesman in the house to make a point of recording in a memorandum book the reason why he failed to sell? Most likely he was not to blame, his salesmanship was in no way at fault, but the fact remains that a person came in with the idea of purchasing a line and no purchase was made. There may be a satisfactory reason, such as a customer coming in for a line that is quite outside of this retailer's business. But it may be that price is too high, the shape is not suitable, the correct size is not in stock, or some other reason.

Such difficulties that a salesman might meet with would be noted and brought forward at the next meeting for discussion. Such a scheme would be all to the good of any business, especially so to a man doing a retail trade.

A principal can do a great deal towards securing loyalty and goodwill to his firm by treating his employees with a word of encouragement from time to time.

A kind word will often do much towards redoubling the efforts of a salesman who possibly has in the past not been very successful in the selling field.

## CHAPTER XIX

## HOW TO TAKE STOCK

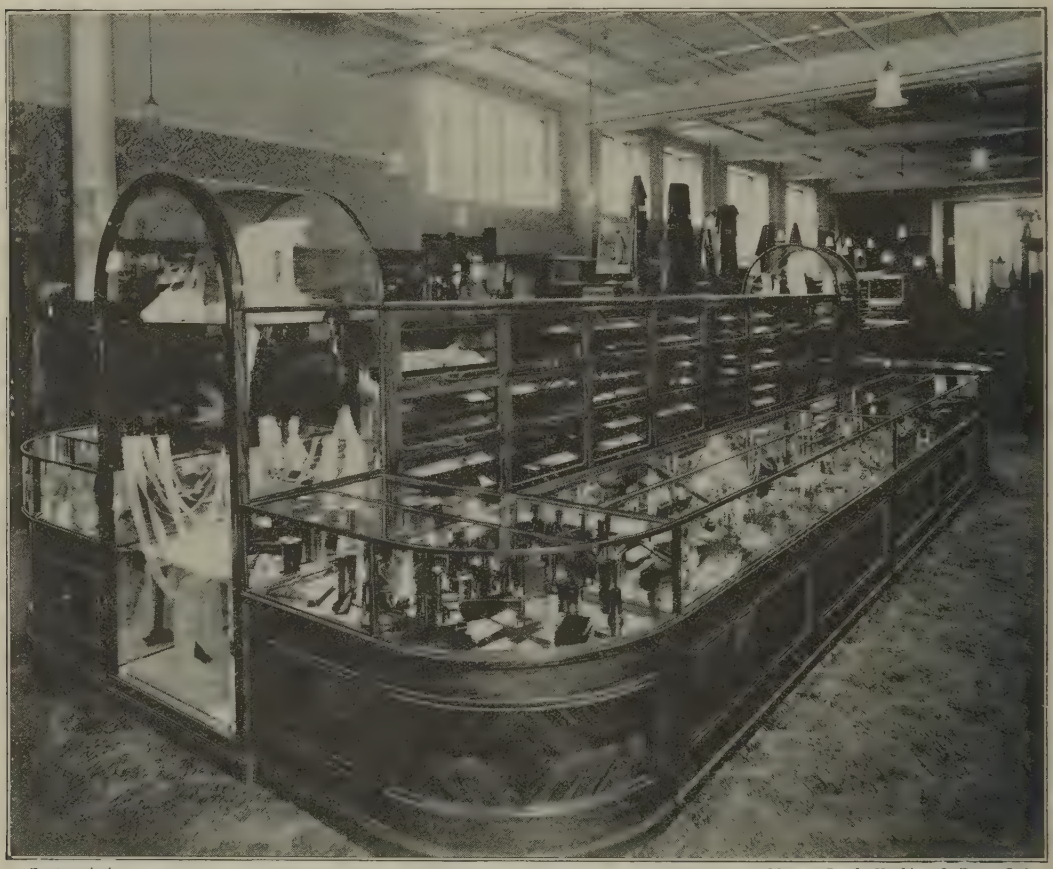
The system of taking stock at the end of a six or twelve-months' period varies very considerably, one house from another.

To get out an accurate stock list is not easy, especially in the large houses where possibly two, three, or more days are required to list the whole of the goods in one department, and it must not be forgotten that during the stocktaking period, goods are continuously being sent out so that one will realize that great care must be taken in order to see that *all goods* in stock on (say) 30th June are recorded on the stock sheets. Many retailers close down for a day in order that the stocktaking may proceed uninterrupted by the shopping public. It is, however, not possible for many of the larger houses, either wholesale or retail, to take down the whole of the stock in one day, consequently as a longer period is required, it is essential that some check system be in operation in order to prevent goods which have been sold on one of the days of the stocktaking from being taken as being in stock. If this occurred it would, of course, result in a fictitious profit being shown.

## Time for Stocktaking.

To begin with, a trader should arrange that his stocktaking takes place at the slackest time of the year. Many of the wholesalers take stock about the 20th December, at which time purchases by the retailers have practically ceased for the year.

This quiet period enables a department manager to put almost the whole of his staff on stocktaking and the work can be carried on almost without a break, seeing that what few orders may be coming in are easily executed by one or two assistants.



*By permission* *Messrs. Saml. Haskins & Bros., Ltd.*

SHOP EQUIPPED WITH "SERVESI" FITTINGS

## Changes During Stocktaking.

We will assume that the stocktaking day is fixed as 18th December, and assistants commence taking down about seven days previous to this date. It would mean that during these seven days, goods will be sold of many lines which will already have been listed ready for entering on the stock sheets, so that items invoiced prior to 18th December would either have to be struck out or altered. As an example we will take it that there is a package on 14th December which, after being checked, is marked—

144 doz. Gloves @ 23s. 6d. per doz.

The following day, 15th December, orders are received from customers for 13 doz., and the goods are despatched. Should the listing on the stock sheets be left until the last day, it would mean that the stock itself, marked 144 doz. on the ticket pinned to it, would have to be altered to 131 doz., and if another order came in for this particular line the following day, a further alteration would have to be made.

Such a system could not be satisfactory, as mistakes would be bound to arise and one would not be able to arrive at the true figures.

## A Reliable System.

A system which the writer has found very reliable and one likely to result in an accurate stocktaking is the following—

On all goods which are taken into stock is pinned or attached a label marking the lines examined and checked as: 12 doz. Tapestry T covers, 72 × 64, 156s. per doz.

Instead of altering the slips each time a sale is effected of these goods which have been counted and checked, a specially-marked departmental book, called the Stocktaking Slip Book, is used to record the entries made.

These books are a smaller size than the ordinary departmental Slip Book, but are always used at the stocktaking period to enter up sales of lines already listed. By keeping these special books there is no necessity to make any alteration of the stock tickets.

These books, specially marked "stocktaking," are only used to enter sales of those goods which have been checked and are ready to be entered on the stock sheets.

Department slips for orders executed from those goods which have not been checked and marked, are entered through the ordinary departmental Day Book or Slip Book.

## No Alterations Necessary.

It will be seen, therefore, that in this system no elteration of stock figures in respect of goods examined, checked and listed need be made, as in order to arrive at a true value it is only necessary for the amounts to be got out from the special Stocktaking Slip Book and the total is then deducted from the total shown on the stock sheets. The alteration or re-marking of stock is dangerous. For instance, we will assume that a certain stock in the fixtures has been counted and checked, and a slip is attached showing that the packages contain 148 doz. half-hose, etc. Orders from this stock are executed by three different assistants, each taking out 3 doz., 2½ doz., and 6 doz. respectively. This would mean that each assistant would take out his own quantities which would have to be checked and three alterations made on the stock ticket. All this is extra checking, and danger of errors is avoided by allowing the original stock ticket to remain and entering such sales through the special Stocktaking Slip Book.

A correct adjustment would take place after the necessary extensions and additions were arrived at from the *Stocktaking Departmental Slip Book*, the total amount of which would be deducted from the total stock entered up.

## Arrival of New Goods.

In taking stock we have also to reckon with new goods arriving during stocktaking period. As far as possible purchases should be stopped during this time.

STOCKTAKING SLIP BOOK

_____DEPT.

| Article. | Stock No. | Purchased from. | Selling Price. | | | Stock Quanty. | Cost Price. | | | Extension Column. | | | Totals. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | £ | s. | d. | | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| | | | | | | | | | | | | | | | |

If goods coming in during stocktaking time, say, 17th December, should not be required, it would be a good plan to keep the goods on one side out of the department and instruct the senders to date invoice as 22nd December, or 1st January of the following year, so that goods need not be taken into stock.

## Checking of Stock Sheets.

Extension of items on stock sheets and additions may be done by a buyer's own assistants, but it is advisable that all checkings in relation to these entries should be carried out by the counting-house. Further, there should be a uniform system in use by all departments in making up stock sheets. For instance, there may be a line of goods which in entering takes up over a page and has to be carried forward. Two cash columns should be used and the total only be carried forward into the right-hand column.

It is most important at stocktaking periods that every invoice received, either for present date or forward dated, should be shown on a slip attached to the stock sheets and signed by the head of a department.

For instance, a buyer may have delivered a week or so previous to stocktaking, goods which

he does not require until the following month. He does not wish to have these goods taken into stock as the lines are not likely to sell for a few weeks, and the invoice is therefore held over until after stocktaking. There is nothing to prevent an unscrupulous buyer from putting these goods on his stock sheet and holding up the invoice, the consequence being that a fictitious profit would be shown.

It is therefore advisable that all invoices of goods which have not been taken into stock should be declared, and a statement made as to the reason why such invoices are held up.

In an earlier chapter is described a system of recording invoices before they are passed into the departments, so that should a buyer's statement as to invoices held up not be correct, one is enabled to inform the buyer of the missing invoices without any difficulty.

### Certificate.

The following form of certificate might be used—

> The sheets marked 1 to 51, showing a total value of £5,640 17s. 9d., have been extended, added and checked—
>
> I certify that the quantities and prices as shown are correct and taken in at cost price, and that I have made reasonable reductions for depreciated stock.
>
> I certify that all invoices for goods shown on these stock sheets have been duly passed.
>
> (Signed) *J. Brown.*

## CHAPTER XX

## CONTROL OF WAREHOUSE BUYING

This subject is dealt with to some extent in the Section on "Buying Goods," but there are certain points which should be mentioned in this Section.

With regard to stock-keeping, it is essential for a buyer to appoint an assistant who can be relied upon to give information at short notice respecting any stock on hand. Unless the buyer can quickly be supplied with accurate particulars regarding stocks, there is a danger of orders being placed for lines of which possibly there is a sufficiency for the next two or three months' requirements. A stock-keeper should have some system of watching stocks, so that when any particular line is getting low he can at once inform a buyer of the position. If this is not done, it is possible for a department to be out of lines for which there is a regular demand, and the consequence of negligence in this respect is decreased sales. Further, many "remains" would be made, as the particular line would have to be left out of customers' parcels, and this would mean extra expense in the way of carriage, "remains" having to be sent carriage paid.

The management of any business will place a check on overbuying and consequent heavy stocks, but a buyer who, from a lack of system, allows stock to be sold out without immediate replacement is courting disaster. The retailer nowadays does not buy big stocks except of "bread-and-butter" lines, preferring to work on the "hand-to-mouth" principle; consequently if a wholesale house cannot deliver special requirements within a day or two there is a tendency for the retailer to try elsewhere where more prompt delivery may be effected.

### Fixing a Limit on Purchases.

Most houses nowadays fix a limit for each department as regards monthly purchases according to the requirement of each section, and unless with the sanction of the general manager no buyer is permitted to go beyond the figures which have been laid down. A buyer will enter each invoice immediately the goods are checked and put into stock. The addition should always be up to date (this can be done by inserting pencil figures daily) so that at any time a departmental manager may see exactly the value of his purchases up to that date and know the balance which he is at liberty to expend during the remainder of the month. There may be instances at "sale" periods or at certain other times of the year (for seasonable goods) when increased purchases will be desirable, but in such cases the buyer should get out his figures and place the same before the management with a view to obtaining permission for making purchases over and above the limit allotted to him.

### Receipts of Goods.

In the packing-room should be kept a book in which are entered particulars of goods as they arrive, and as soon as possible after the entries have been made the packages should be forwarded to the department concerned.

For instance, if a case of gloves has just been received from the railway company, it is examined and if it appears to be quite in order and has no appearance of having been tampered with in any way, a signature for the receipt of the case is given to the carter or carrier bringing it.

Gloves Department is informed of the arrival of this consignment, and will then, perhaps, give instructions for the case to be unpacked and the boxes to be sent up. The packing-room assistant receiving the case will, however, obtain a signature from the departmental assistant receiving the goods. It is advisable that the lines be checked off from the invoice which has no doubt already been received, so that in case of short delivery, or for any other reason for which the invoice would not be passed, an advice may be sent to the consignor without delay. Although a case or parcel on receipt may not have the appearance

of having been tampered with, it is as well to check goods off at once so that if a claim has to be made it can be put through at the earliest possible moment.

During a rush period there may be a tendency for department heads to request the packing-room to hold up goods on one side until there is a favourable opportunity for them to be checked off. The danger of such action is that, in the event of a claim being made later for shorts, such claim may be "turned down" on the ground of unreasonable delay.

## Checking of Invoices.

The only checking which is done by the department section is to see that the exact goods as invoiced are received, and that the prices charged are correct.

A buyer will, of course, have his order book in which entries are made when orders are placed, and as goods are received particulars will be entered against such entries.

A good method of keeping a check on deliveries is for a buyer, when entering an invoice against goods ordered and where the order is not completed, to make a follow-up for the balance still to be delivered. If, for instance, an order is placed for 500 pairs of gloves, these are entered in the order book—

J. BLANK & COMPANY, LTD.

| Date Ordered: 192_ | | Delivered: |
|---|---|---|
| Nov. 10th | 500 doz.—Gloves] size, etc. | 300 doz.—Gloves state remainder to follow 17th Nov. |

*Photo* *Kealeys, Ltd.*

A Purchasing Department

There are still 200 doz. to be delivered to complete the order, and a promise is made that the remainder will be sent by 17th November. The buyer should note in his diary, under date 20th November, "200 doz. gloves, balance of order Blank & Co., promised for 17th November."

After being signed by a buyer invoices are passed to the counting-house to be checked and posted to the credit of the sender's account. The extensions are worked out and the additions carefully checked, and if quite in order they are initialed by the Purchase Ledger clerk who is responsible for this work, and entered in the departmental Purchase Book ready for posting.

In case there should be a mistake in an invoice

the buyer must be informed at once so that there be no delay in informing the senders of whatever difference may have arisen. When checking invoices special care should be taken to see that amounts forwarded to another sheet are carried forward properly, and that additions are quite correct. If a mistake on an invoice is passed, and an incorrect amount gets into the books, there is little likelihood of discovery of the error being made at any later date.

For instance, Blank (sender) invoices goods to the value of £158 16s. 4d.; actually the goods amount to £128 16s. 4d., but in carrying forward to a continued invoice form the sum of £55 18s. 6d. is entered up as £85 18s. 6d. Extensions and additions have been properly checked, but the wrong carry forward is overlooked, with the result that when Blank sends a statement for £158 16s. 4d. this amount is paid. The department purchasing the goods loses £30. A mistake passed in the manner described is not likely to be discovered later, so that it will be seen how essential it is, in checking invoices, to use the greatest care with extensions, additions and the proper carry forward of an amount from one sheet to another.

### Bought Returns.

When goods are returned, a debit note is sent the same day with an accompanying letter giving the reason why the goods are not acceptable. The buyer makes an entry in his departmental Debit Book, and the slip made out is initialed by him and sent down to the packing-room with the goods. This slip is then sent to the Purchase Ledger clerk who is responsible for making out the debit note; this latter is sent to the manufacturer, after which an entry is made in the Debit Book and posted to the manufacturer's Ledger account.

It is essential that these entries are posted *immediately*, otherwise there is the danger of an account being paid without a debit being deducted.

The importance of this has been strongly emphasized in a previous chapter.

## CHAPTER XXI

## CONTROL OF WAREHOUSE SALES

Careful and courteous attention to customers in the house, coupled with sound salesmanship, is essential if the most satisfactory results are to be obtained; many houses are equipped with good salesmen and saleswomen, but there is often lacking a keenness on the part of departmental assistants to see that customers receive immediate attention. Salesmen have other duties to perform in addition to selling, such as "getting up" a section of the daily orders, and as they are naturally anxious to keep straight with this work, customers are at times allowed to await their convenience. There is nothing more annoying to a customer than to be kept waiting until such time as it may suit an assistant to "forward."

As slack methods can only result in a loss of trade, it is necessary that a buyer makes rules of so strict a nature that will ensure attention being given to a customer immediately he or she enters the department. In the buyer's absence his first man should be held responsible.

We will assume that, in a department, there are six assistants and a buyer, and that goods have to be got out and entered by these assistants to fill orders received from travellers and through the post. The work should be so arranged that the duties of two or three assistants as to getting up orders, etc., are lightened in order to give them plenty of time to attend to customers.

It is the feeling that "if I attend to this customer I may have half an hour of my time taken up, and my post orders are not nearly finished" that is responsible for this reluctance to "forward."

The buyer, or in his absence someone appointed by him, should see that no customer is neglected or kept waiting at all, and all the staff must attend if necessary.

In Chapter XVIII mention has been made of a bonus scheme for indoor salesmen. The writer is a strong believer in offering such inducement over and above a salary, in order to get assistants to put forth their best efforts.

### Waiting Sales—Delays.

A good many customers, especially those whose premises are within a reasonable distance of the wholesale houses from which they purchase, will make a regular practice of buying in the house instead of ordering through the post or from travellers' samples. And in order to save carriage, instructions may be given for goods to be sent to the Left Luggage Office at the railway station, or to await the buyer's later call.

A customer having to wait an unreasonable time, or finding, when arriving at the station, that goods have not been forwarded according to his instructions, is likely to be much annoyed, especially as the goods have now to be sent on and carriage charges paid.

Slackness in attending satisfactorily to sales in the house is likely to result in business being lost, as it is only reasonable to suppose that, of two or more houses doing a similar class of goods, preference will be given by the retailer to the firm which gives him the best attention. Delay in executing "sales," although prevalent in many wholesale houses, might be very easily remedied.

In connection with sales in the house, it is not always possible to let customers have invoices at the time goods are taken away. This causes much inconvenience as it prevents goods being checked off and put into stock until the invoice

arrives. Further, it may prevent sales being effected, especially as a customer may not always be sure as to the prices charged. In order to overcome this difficulty it will be found a good plan to use a triplicate slip book in the departments. One entry is, of course, retained in the book in the department, another is sent to the invoice office so that a proper invoice may be made out, while the third is enclosed in the parcel. By working on this system, a customer can check goods, quantities and prices, and may safely put the goods into stock without any difficulty.

An official invoice is, of course, despatched later, but the department slip enclosed in the parcel is quite sufficient for the time being.

## Goods on "Appro."

While some houses refuse to entertain any requests for the despatching of goods on approval, there are many wholesale houses which do a very considerable trade in this connection. Goods on appro. have, of course, to be treated on lines altogether different from those on which "firm" orders are dealt with.

For example, a customer writes to a retailer: "Send me three raincoats, No. 7, on approval. Will return any not kept within three or four days." This is a line which the retailer does not regularly stock; he, therefore, informs his customer that he can show him the garments in two days, and asks his wholesale house to send on sale or return. Probably one only is sold, in which case the retailer returns the other two, unless he considers it worth his while to keep them. It certainly pays the wholesaler to forward goods in this way as it means an increased trade which he otherwise would not obtain.

A retailer orders a line specially asked for, his customers require a selection to choose from, so the wholesaler is asked to accommodate. Instead of keeping the one article required—three have been sent—one of the others is sold the same day as shown, so the retailer decides to keep the other at a little risk. It is likely that he will soon be running this line regularly.

Various different methods are adopted by wholesalers in dealing with appro. parcels. A well-known wholesaler makes a point of charging up goods when despatched and forwarding an invoice. In fact the customer is debited at once with the goods, and if part or the whole is returned, a credit note is sent. The reason for dealing with appro. parcels in this manner is that there is no danger of items being omitted to be charged up. The method is unsatisfactory, however, as it results in credits being passed for an unreasonable amount, which will show up a department in a very bad light unless a record is kept separating the credits passed in connection with appro. parcels from those passed in connection with "firm" orders.

A reliable system, and one which is easy of working, is to have special appro. departmental Day Books in which entries are made of only those goods which are sent on sale or return. One assistant in each department is made responsible for the charging up of those goods which are kept, and for watching that no appro. parcel is allowed to be kept beyond the period arranged. These books differ from the ordinary departmental slip book inasmuch as the printing, firm's headings, etc., are in red, as are the conditions as to terms on which the goods are despatched, which are shown at foot.

Main Street,
Birmingham,
21*st Nov.*, 192–

OUTFITTING.

JOHN BLANK & CO., LTD.

Sent on approval to *A. Marshall, Ayres Road, Manchester.*

Goods not returned within 10 days from date will be invoiced and debited to your account.

*Charged to account*
*2nd Dec.*, 192–
*J. J. Waters.*

These forms are sent down to the packing-room with the goods. The appro. invoice slip is forwarded to the office and from there sent through the post, but before this is done an entry is made in an indexed book against the department concerned. This is the office record of all appro. parcels sent out and is used, as will be explained, to check the departmental figures.

## Departmental System.

The appro. book is gone through daily by an assistant, and where goods have not been returned by the time specified, an entry is made through the general department slip book, charging up the customer with the goods he has on hand. Take the entry to Mr. A. Marshall, to whom three raincoats were forwarded on 22nd November. These were not returned on 2nd December, so the customer was debited in the usual way with the goods, and the appro. entry was marked across "Charged to account," date, and signature of assistant making the entry.

In case part of the goods were returned, the entry would read—

*Charged* 2 — @ 32/6
1 *returned to stock* } *2nd December*, 192_.

J. J. WATERS.

In order to have an efficient check on these appro. parcels, the office makes a point of checking the departmental entries with the entries in the office book. As already mentioned the entries are made against each department when the goods

are sent out, and if no entry is recorded in the department Appro. Book against goods which have been despatched fourteen days previously, a satisfactory explanation must be forthcoming. No entry in the office record book is, however, struck through until the whole matter has been completed, namely, goods invoiced, or returned.

In this way it is practically impossible for an appro. parcel to be unaccounted for.

## Sales Returns.

It is essential that there should be an accurate method of recording returns, that returned goods should at once be passed to the departments interested, and that credit notes shall be forwarded to customers without delay.

We will assume that Blank & Co., of Dudley, return goods for three departments, Gloves, Haberdashery and Hosiery; the entry in the Returns Book appears as above.

SALES RETURNS BOOK

| 19— | | Butts. | Cords. | Dyes. | Emb. | Furs. | Gloves. | Haby. | Hosy. | Etc. |
|---|---|---|---|---|---|---|---|---|---|---|
| No. 28 | *J. Blank & C., Dudley* | | | | | | 1 | 1 | 1 | |

It is necessary that the packing-room clerk should receive signatures from the department to which returns are sent, otherwise if goods are misplaced, or an assistant puts them into stock without passing credit, endless confusion will arise. In order to avoid this a small duplicate slip book is used, and as returns are passed into the department a signature is required from the assistant receiving them. In the case of Blank, Dudley, the returns clerk makes out three slips, one each for gloves, haberdashery and hosiery, and a signature is required when the goods are handed over to a departmental assistant.

The instructions to departments are that credit notes for returns must be passed if possible the same day as received, but not later than the day following, and the clerk in control of the Returns Book will make a request to departments for credit notes, should they not be sent down by noon of the day following receipt. In our example, Blank's returns (three departments), having been received by the returns clerk, are marked off in his book and passed to the invoice office for a credit note to be made out and sent to the customer. It should be mentioned that, where returns are received from a customer for more than one department, the necessary copying from the customer's letter is done by the office. If there should happen to be a strong complaint respecting a particular article, the clerk dissecting the letter will copy those parts of it which refer to the other departments, crossing off the items as copied, and pass the original letter to the department concerned in the complaint. In order, however, that the other departments interested may, if necessary, refer to the original letter the slips copied for those departments are marked in the left-hand corner with the name of the department in which the original letter is to be found.

## The Despatch Department.

As orders are received each morning, entries are made in the Despatch Book, giving name address, departments and instructions, and as goods are received from the departments these are marked as "down" by making the stroke into a cross, as shown for Buttons Department, and when completed an entry is made of the date on which the parcel was despatched. The book system is not satisfactory, especially where there is a large number of entries. A more satisfactory system is to use cards for each order received: name, address and instructions are filled in and a stroke (/) made against each department from which goods are required. To enable one to make the quickest possible reference to any despatch card it is necessary to have an open ("pigeon-hole") cabinet, with sections lettered alphabetically. Where this despatch cabinet is in use, instead of looking for a name and possibly having to go through the whole of the entries in a book, it is only necessary to look through, perhaps, one-twentieth of the orders received.

When the card for Blank, of Bury, is required to note the goods coming down from the Gloves Department, one goes straight to the section Gl in which there are possibly about ten cards. Later hosiery and lace are received, and a further marking of the card is necessary, until eventually the order is complete.

It is a good plan so to divide the work in a forwarding department, that the goods required can be located in the shortest possible time. Divisions will, of course, be made to suit the requirement of any particular business. Some houses do a big post trade, although sales in the house may be

DESPATCH BOOK

| | Butts. | Cords. | Gloves. | H'sry. | Lace. | Etc. | |
|---|---|---|---|---|---|---|---|
| J. Bank, 14 Main Street, Bury. | X | | / | / | / | | Pass. train. |

small. Others have a good many representatives out, from whom are received the bulk of the orders. If post orders are very heavy, a cabinet for despatch cards may be used specially for this section, in which case goods as brought down will be put in close proximity to the clerk doing this work. In the same way orders executed for post and sales will be placed in the post and sale fixtures.

In order that goods can be dealt with immediately they reach the packing-room to be placed in their correct sections, the packer's slip (made out in the department) for post sales might be of a different coloured tint from that sent down with travellers' orders. By working a colour system it would not be necessary for the person sorting goods to read the department slips in order to ascertain whether the goods are in execution of a traveller's or post and sales order.

This is all a matter of adjustment according to the average number of orders received each day.

All goods which are forwarded other than by parcel post, are entered in books and a signature is required when handed over to the railway company's or carrier's servant. Parcel post parcels are entered on sheets in duplicate, one copy being taken by the postman collecting the parcel, and the other being retained by the sender and filed in order of date so as to be readily available if required at some later date.

## Transfers Between Departments.

Goods supplied from one department to another may be dealt with satisfactorily by using a special department book. Usually these transfers are few, and an arrangement is made to charge the goods at practically cost price.

These obviously cannot be passed through as legitimate sales, as otherwise a department sending to other departments, goods to a substantial amount, and treating such entries as sales, would have its profits increased fictitiously.

As an illustration of how these transfers are dealt with, let us suppose that the Haberdashery Department, on 8th December, supplies pins to Gloves, Ribbons, Corsets and Linens Departments.

*By permission* *Messrs. Saml. Haskins & Bros., Ltd.*

A Well-planned Boot and Shoe Store

These are entered through the Department (transfer) Book, and a slip is sent with the goods to each department concerned. The buyer then initials the department slip if correct, and after making a note of the amount, passes it to the department does not get disorganized even for only a short time.

3. No assistant is allowed to be away purchasing for more than ten minutes.

Special books are used in each department for

192– HOUSE SALES.

| Dec. 8 | Butts. | Cords. | Dyes. | Emb. | Gloves. | Hosy. | Etc., etc. | |
|---|---|---|---|---|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | | £ s. d. |
| T. Jones | 2 6 | 1 9 | | | | 2 3 | | 6 6 |
| Ada King | | | | | 5 9 | | | 5 9 |
| J. Waters | | | | 1 2 6 | | | | 1 2 6 |
| R. Fuller | | | | | 9 6 | 4 2 | | 13 8 |
| J. Barker | | | | | | | | |
| F. Knibb | | Etc. | | Etc. | | | | |
| | 1 2 6 | 2 3 8 | 9 6 | 1 19 6 | 3 8 4 | 2 9 8 | | |

Purchase Ledger clerk. Entries of these items are made in the Manufacture Debit Book under the department supplying the goods as follows—

(25)

HABERDASHERY DEPARTMENT.

| | £ s. d. |
|---|---|
| Dec. 9th/2– Goods to Gloves Dept. (Gl. 22) | 12 6 |
| 9th/2– „ Corset „ (Cor. 29) | 6 3 |
| 9th/2– „ Lines „ (Lin. 118) | 6 3 |

and from here are posted direct in the Purchase Book to the debit of the departments concerned.

In the Gloves Dept. Purchase Book the entry appears—

(22)

Dec. 9th/2– From Haby. Department (25) – 12 6

The Haberdashery Dept. is credited by having the total amount deducted from purchases at the end of the month.

Where purchases are frequently made, it is perhaps advisable to send these charges down to the counting-house fortnightly or monthly, when only the total debits to each department need be shown.

## Sales to Staff.

Most houses allow assistants to make purchases on one day of the week only, and further, such purchases are limited to a certain time of the day. Usually a " quiet " day is chosen, so that purchases by assistants will not interfere in the slightest with customers in the house.

1. Permission must be obtained from the head of a section before leaving to make a purchase.

2. A number of assistants cannot go from their own department to another at one time, but receive permission in turn so that the work in a house sales, the slips being of a different colour for those used for customers' orders.

Slips and goods are sent down to the despatch room, and the goods are sorted in fixtures which are specially used on these house sale-days. Some assistants may have purchased from, say, three departments, in which case the slips are pinned together and when all are completed are passed to the general office. Before sending to the office, however, the parcels are all made up and the person doing this work numbers each parcel in coloured pencil, and the top slip representing the parcel is marked in the same way. The parcels after being numbered are put away on the fixture in numerical order.

A certain time is given when assistants may pay for these house parcels, say, from 4.0 to 4.30 in the afternoon, and any goods not paid for by 4.30 are sent back to stock. Where a number of purchases are made by one department, one assistant may be sent down to the office to pay for all.

So that each assistant may get his or her parcel without delay, a metal disc showing a number is given as each payment is made. The clerk taking the money notes that the top slip is marked with a number and thereupon hands the buyer the check with that number, which enables him to obtain his parcel in the packing-room when going home. The check is, of course, given up when the parcel is obtained.

It is not necessary to journalize these slips in detail, but only the totals of each department for the weekly purchases.

The clerk who receives the payments from the assistants uses a small book ruled as above

In the Day Book under House Sales, only one entry need be made, showing the total amount of each department.

SECTION 15

# Office Machines and Appliances, and Labour-Saving Devices

By P. T. Lloyd

## CHAPTER I
## INTRODUCTORY

The fostering of handicrafts is no doubt admirable from the purely artistic standpoint, but few would admit that the routine and mechanical processes of the modern office contain, in themselves, the faintest element of aesthetic appeal. Speed, accuracy, and clearness (in the sense of being legible and pleasing in appearance), represent rather the more essential qualities with clerical work, and the machine-like nature of these qualities constitutes one of the principal factors in favour of the office appliances of to-day; indeed, it is surprising that the application of the science of mechanics to the calculating and recurring work of the office has been retained for the present generation to develop. The progress of invention in this field has, within recent years, been so rapid, that the business man may well be excused if he has failed to keep himself posted with all its phases. So great is the variety of machines now available, that an intensive study of the subject from the text-book, or the business exhibition, is apt to bewilder rather than assist the layman, and the expert has sometimes to balance the relative advantages of similar machines with a fine degree of nicety before recommending the most suitable model for a particular class of work.

With the largest organizations, the improvement of accounting and secretarial practice has been a gradual process of evolution, until the "mass-production" principles of the factory have, in effect, been extended to the office. With the smaller business house, there has for long been a mistaken view that little or no opening existed for the introduction of labour-saving appliances, partly on account of the smaller volume of work, and partly through an erroneous idea that *every* machine is limited to the performance of a single function. The more elaborate type of accounting machine might certainly prove an extravagance in such circumstances, but these more complicated devices have merely been built up from simple origins, and a "throw-back" to an earlier type will usually reveal a more suitable model.

### The Work Performed.

To limit one's interest to an appreciation of the mechanical ingenuity by which the results are produced is fatal. The proper functioning of the machine is the business of the makers, and our attention should be concentrated, in the first place, solely on the work performed, any study of the mechanical side of the operation being reserved for the secondary stage of considering the rate of output. This advice may appear to be superfluous, but the initial attitude in regard to office machines is too often similar to the amused tolerance with which we watch a conjuring trick, and the potential value of the apparatus for lightening uneducative routine is then overlooked. Nor is this lack of appreciation confined to the non-user of labour-saving appliances; adding machines have been installed and operated as accounting accessories for years, before it has been realized that they were capable of performing the accounting work itself.

The descriptive analysis of modern office equipment which follows will not, therefore, be a mere catalogue of the various appliances now on the market, but rather a collection of summarized and non-technical information relating to the more simple types, illustrating the class of work for which each is suitable. For the benefit of those who may wish to pursue the question beyond this stage, reference will be made to the more elaborate, and therefore more costly appliances; it will at the same time be well to bear in mind that, where a particular process necessitates the employment of two or more separate and distinct forms of apparatus (e.g. for addressing, sorting and tabulating, etc.), the makers will often relieve the purchaser of that portion of the work on which an outlay of capital for plant would not be justified.

### Machines Operated by Keys.

It is perhaps desirable, before leaving these general questions, to refer to one common but uninformed type of criticism with regard to machines operated, like a typewriter, by means of keys. When every reasonable demand has been satisfactorily met, the prospective user almost

invariably falls back triumphantly to the point that the machine is not "fool-proof," in that it is possible to depress the wrong key. The mental worker might add "7" to "8" and call it "16," but merely from inadvertence and not from habit. Again, "7" might be written down as "8," but this would be classed as gross carelessness. How much more culpable, therefore, would be the operator who, even after a brief experience, failed to read and depress the correct digit on a vividly clear keyboard; and especially so with one type of adding machine (the Burroughs) where the appropriate keys remain below the level of the others, until the complete item is "cleared" preparatory to the entry of the next, thus causing a sub-conscious check to be made on the figures.

## CHAPTER II

## ADDING MACHINES

So far as basic principles are concerned, the adding machine proper is a typewriter which prints a series of figures on a continuously moving roll of paper, and automatically *prints* the total at the foot of the column. In all cases, therefore, where lists of documents have to be prepared, e.g. making out bank paying-in slips, scheduling invoices for goods bought, summarizing sales by salesmen, lines of goods, cash, credit, etc., or figures have to be extracted and totalled, e.g. stocktaking, preparing trial balance or statistical statements, the operator enjoys a considerable advantage, in that it is possible to enter and total the amounts faster than the writing alone could be performed with a pen.

If a typewritten record is not required, a "non-listing" machine of this class is operated in a precisely similar manner, and the total read from a series of openings or slots which expose the digits required.

### The Burroughs Machine.

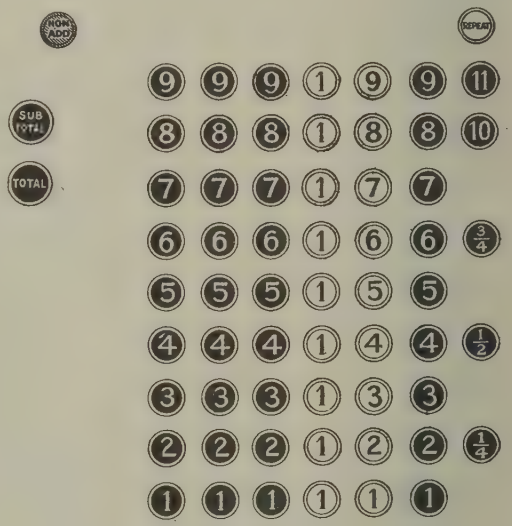
The general arrangement of the KEYBOARD on a Burroughs machine is shown on this page, the divisions for sterling being indicated by the alternate use of black and white keys. It will be observed that the full range of digits (from 1 to 9) is provided in each case for the units, tens, hundreds, etc., positions, each vertical row being called a "column"; it is not possible to depress more than one key at a time in each column. Other special features common to the keyboard of this class of machine are as follows—

1. The keys used for recording each item remain below the level of the others until a handle (or lever) at the side of the machine is pulled forward, thereby printing the entry on a roll of paper, and including it in the totalling mechanism.

2. If a wrong key has been depressed, it can be restored to its normal position, and a correction effected, before the handle is actuated.

3. Where a large keyboard with, say, nine columns for pounds, is in continuous use, the handle is usually replaced by an electric motor, which is brought into action by lightly depressing a "touch-bar" (similar to the spacing bar of a typewriter) placed on the right of the keyboard.

4. Ciphers, it will be noticed, are excluded from the keyboard and are, in fact, ignored by the operator; although not required for adding purposes, they are always printed on the paper. If, for example, the key in the first column marked




KEYBOARD OF BURROUGHS "RETAIL" MACHINE.

"8" is touched, an entry, "£800–0–0," will be recorded.

5. A long "run" of the same amount can be recorded with a single "writing" on the keyboard, after setting the "repeat" key.

6. The "non-add" key enables the operator to use the keyboard, at any stage, for numbering purposes, without including the item in the total.

7. With larger machines the left side of the keyboard can be "split," so that numbers and values may be recorded and totalled simultaneously.

8. In addition to sterling, keyboards for weights, measures, and decimal notation, can be provided.

9. The total is obtained, whenever desired, by holding down one of the "total" keys, and again pulling the handle. The different methods of aggregating the entries will be referred to presently.

The next feature of the mechanism to be examined will be the CARRIAGE. This, as in the case of a typewriter, is for holding the recording

*Photo* *Kealeys, Ltd.*

SECTION OF A WAREHOUSE

(Messrs. T. H. Harris & Sons, Ltd.)

medium, which may be a roll or sheet of paper, or even a card. The roll of paper is normally retained in a constant position, the used portion being detached along a cutting bar as necessary. Alternatively, sheets of paper up to any reasonable size may be inserted in a roller on the carriage, and columns of figures produced for a statistical statement, or pay-roll, by moving the carriage in a horizontal direction as each column is completed. Whatever the form of paper may be, it automatically moves upwards with each entry during the preparation of the individual column. The

| £ | s. | d. | |
|---|---|---|---|
| 1 | 2 | 4 | |
| | 3 | 6 | |
| | 2 | 7 | |
| | 4 | 0 | |
| 1 | 5 | 2 | |
| 2 | 17 | 7 | (A) |
| 1 | 5 | 6 | |
| | 3 | 0 | |
| 1 | 8 | 5 | |
| | 7 | 9 | |
| 6 | 2 | 3 | (B) |
| 2 | 18 | 6 | |
| | 2 | 5 | |
| 1 | 8 | 3 | |
| 1 | 0 | 10 | |
| | 15 | 7 | |
| 12 | 7 | 10 | (C) |
| | 2 | 8 | |
| | 3 | 4 | |
| 1 | 17 | 6 | |
| 1 | 18 | 10 | |
| | 2 | 7 | |
| 2 | 4 | 5 | |
| 6 | 9 | 4 | (D) |
| 2 | 16 | 7 | |
| 1 | 8 | 4 | |
| | 5 | 8 | |
| | 2 | 4 | |
| 2 | 15 | 11 | |
| | 8 | 7 | |
| 7 | 17 | 5 | (E) |
| 26 | 14 | 7 | (F) |

upward advance can be regulated to a distance of one, two, or three lines, at one time, and as this line spacing corresponds to that of nearly every typewriter, it will be seen that the figures in a tabular statement could be inserted against the typewritten (or printed) entries of an item column. When the strip record only is required, a duplicate can be prepared, without the use of carbon paper, by means of two rolls of paper and a double ribbon.

Attention has been devoted, so far, to the mechanical side of the appliance: the next and final stage will be to give some indication of the various methods of arranging the resulting RECORD, and the different forms of total obtainable. For

BURROUGHS "RETAIL" MACHINE.

simple listing purposes, the entries on the roll of paper might appear somewhat as shown in the opposite column. The totals (A) and (B) are recorded by depressing the "sub-total" key, and are cumulative totals showing the position at these points, leading up finally to the total at (C) for the first group of figures. If the printing of sub-totals is not required, the accumulation of the figures can be watched continuously from the apertures at the base of the machine. The totals for the second and third groups are shown at (D) and (E) respectively, and the grand total for the three groups at (F). A "Duplex" machine has to be used when grand totals are required. The letters shown above have been used in the present instance for reference purposes; the various classes of totals are, in practice, indicated by special signs.

Tabular statements can be prepared, as on p. 346, the number of columns being limited only by the size of the paper. The statement would be prepared by taking one column at a time, and entering the amounts progressively downwards, but with a

machine fitted with what is known as a "shuttle" carriage, the posting against each item can be made *across* the page, the carriage moving automatically from column to column for each entry; a grand total is not, however, given under the latter process, and four columns only can be posted at one time.

| Item (already) printed). | A. | | | B. | | | C. | | | D. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| 1 | 7 | 11 | 3 | 8 | 1 | 0 | 6 | 18 | 0 | 5 | 3 | 10 |
| 2 | 2 | 9 | 2 | 3 | 16 | 10 | | — | | 1 | 15 | 9 |
| 3 | | — | | 8 | 19 | 1 | 7 | 18 | 7 | 2 | 16 | 7 |
| 4 | 3 | 13 | 9 | 6 | 9 | 5 | 4 | 4 | 3 | 5 | 5 | 9 |
| Etc. | | | | | | | | | | | | |
| TOTALS | 13 | 14 | 2 | 27 | 6 | 4 | 19 | 0 | 10 | 15 | 1 | 11 |

Grand Total: £75 3 3

This particular make of adding machine has been described in some detail in order to give a general idea of the capabilities of machines devised for figure work, and the simple model, illustrated on the previous page, can likewise be regarded as typical of the usual appearance of these key-driven appliances. By reference to the functions already analysed in connection with the keyboard, carriage, and record, combinations can be effected for meeting the requirements of practically every class of business.

## The "Sundstrand" and "Dalton" Machines.

The outstanding feature with these machines is the keyboard which, so far as numerals are concerned, contains ten keys only. The keyboard is operated like that of a typewriter, although no horizontal movement of the carriage is necessary; e.g. four depressions of the key for, say, the digit 9, followed by three depressions for 7, would be shown on the recording strip, thus—

9999
777

and correctly added together under the respective "columns" of figures. The closer grouping of keys, however, as shown by the Sundstrand keyboard, enables the hand to cover the whole range, and since operating is entirely by "touch" (i.e. the fingers can, after a little practice, depress the correct keys without moving the eyes from the copy) a very high rate of speed can be developed. The machines have hitherto been designed for decimal currency only, but models for sterling are now available.

## The Comptometer and Burroughs Calculator.

Here, again, the "touch" method is employed, although the full keyboard (the complete series of digits from 1 to 9 for each column of figures) is provided. The area of operation is, however, usually restricted, in practice, to the middle of the keyboard, the principle of working being to depress two keys for the larger amounts (e.g. "5" and "4" for "9"). The selection of keys by touch is assisted by making the surface of those for odd figures concave, and those for even figures flat. Another feature peculiar to this class of machine is the fact that the depression of the keys completes the operation, i.e. it is unnecessary to pull a handle, or actuate an electric motor, after each entry; on the other hand, the machine is a "non-lister," and, for adding work, its activities are limited to the casting of figures already typed or written in manuscript. The

KEYBOARD OF "SUNDSTRAND."

process is, however, extremely rapid as compared with mental work.

## Adding and Subtracting Typewriters.

There are several makes of typewriters to which a small adding attachment, or "totalizer," working on the principle of the cyclometer, can be connected for building up the totals of all money items written, in the ordinary way, on the keyboard. The total is not printed on the paper by this device, as with an adding machine, but is read from the indicator on the totalizer, and written down by depressing the numeral keys as usual. If it is necessary to make a deduction from the list of figures, a subtracting lever can be touched, and the adding wheels of the totalizer at once begin to revolve in the opposite direction, until a net total is arrived at; the subtracting device can also be used for making adjustments

(so far as totalling is concerned) when an incorrect amount has been entered. When the final total has been recorded on the paper, the indicator on the totalizer returns to zero, and the accuracy of the operation is ensured from the fact that the adding wheels are only restored to the zero position when the correct keys have been struck. The adding machine has a very limited capacity as regards the description of items, whereas the adding typewriter can insert any narration required and, for this reason, is eminently suitable for preparing invoices or statements. It should perhaps be explained that the totalizer cannot be connected with the ordinary typewriter which may happen to be in use, but has to be associated with a special form of machine; the adding device can, however, be put out of action when the typing of letters, or other non-figure work, is required.

CHAPTER III

## BOOK-KEEPING AND ACCOUNTING MACHINES

MACHINES for accounting or statistical purposes (the two classes of work are closely related) may be divided into four groups—

1. The adding machine type.
2. The adding typewriter, with the usual carriage for shifting the paper from one position to another.
3. The travelling typewriter, which is moved over the surface of a *fixed* sheet of paper, and actuates a series of stationary totalizers.
4. Tabulating machines, which automatically classify and total the same set of figures from different aspects.

### (1) The Burroughs Book-keeping Machine.

From the description which has already been given of the functions of an adding machine, it will probably have been realized that it is but a simple step further to adapt it for accounting purposes. The essential difference in working lies principally in the fact that, instead of showing a continuous series of figures on the same sheet or slip, the individual entries have (in the case of ledger posting) to be inserted on separate sheets of paper, or on cards. The book-keeping machine can, however, go much further than this, and where a simple posting of one item per sheet, with a total of all the entries waiting at the end of the run, is insufficient, a more elaborate model can be employed which will pick up the outstanding balance on each account, enter the debits and credits, show the closing balance on the account for the day, and, finally, give totals for all debits and credits. The operation of entering the amounts in the correct columns, and striking the daily balance (the machine will subtract as well as add) is performed automatically by manipulating the keyboard in the usual manner, and the posting is further assisted by the following features—

(*a*) The date is set for the day, and is printed on each account without any attention from the operator.

(*b*) Descriptive keys are provided for indicating, in abbreviated form, such items as goods, cash, discount, empties, balance, etc.

(*c*) A separate part of the keyboard is reserved for printing folio numbers.

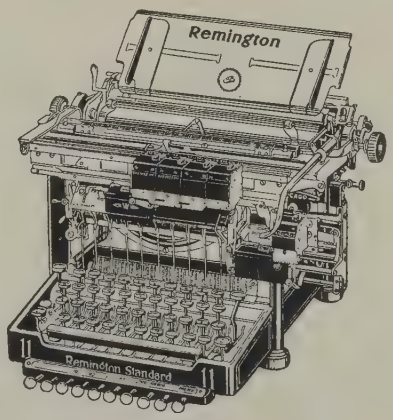
(*d*) An attachment to the carriage called an "injector" (which is similar in principle to the high gear on a bicycle) enables the operator to pull each sheet immediately into position for posting, and to eject the sheet as rapidly when the posting is finished.

A loose-leaf or card system is, of course, necessary with this form of machine posting.

The operation of this class of machine is quite unskilled yet rapid work, and the daily printing of the progressive balance not only facilitates the watching of individual credit limits, but also eliminates congestion at the end of the month, or other accounting period.

### (2) The Remington-Wahl Accounting Machine.

By a slight extension of its functions, the adding and subtracting typewriter can also, like the adding-machine proper, be applied to accounting procedure, the adding of several columns of figures being effected by placing extra totalizers (one for each column) on the machine, as shown below, where four totalizers are in position




REMINGTON-WAHL ACCOUNTING MACHINE

immediately above the keyboard. A little below the position indicated, and on the right of the machine, will be seen a further totalizer; this aggregates the whole of the figures entered in the different columns. In addition to the advantage of being able to write any text required, this type of accounting machine is peculiarly suitable for preparing columnar statements, similar to that illustrated below. It will be seen that the figures have been totalled in both a vertical and horizontal direction—a feature at present outside the range of an ordinary adding machine—while the subtracting facility enables the operator to obtain a direct reading for the *net* totals of the final column. The preparation of statements or summaries of this nature resolves itself, therefore, into a simple operation of copying figures.

| Item. | A. | | | B. | | | C. | | | D. | | | De-duct. | | | Net Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| 1 | 2 | 4 | 7 | 1 | 3 | 1 | | 4 | 6 | 2 | 8 | 7 | | 8 | 11 | 5 | 11 | 10 |
| 2 | 1 | 2 | 5 | 1 | 8 | 6 | 3 | 2 | 4 | 2 | 1 | 3 | 1 | 1 | 4 | 6 | 13 | 2 |
| 3 | | 3 | 6 | 2 | 11 | 3 | 1 | 5 | 7 | | 8 | 5 | | 2 | 6 | 4 | 6 | 3 |
| 4 | 1 | 7 | 9 | 5 | 12 | 4 | 2 | 12 | 10 | 1 | 10 | 10 | 2 | 10 | 8 | 8 | 13 | 1 |
| 5 | 3 | 1 | 8 | 1 | 1 | 9 | 1 | 11 | 8 | 3 | 11 | 5 | | 11 | 7 | 8 | 14 | 11 |
| Etc. | | | | | | | | | | | | | | | | | | |
| Totals | 7 | 19 | 11 | 11 | 16 | 11 | 8 | 16 | 11 | 10 | – | 6 | 4 | 15 | – | 33 | 19 | 3 |

## (3) The Elliott-Fisher Book-keeping Machine.

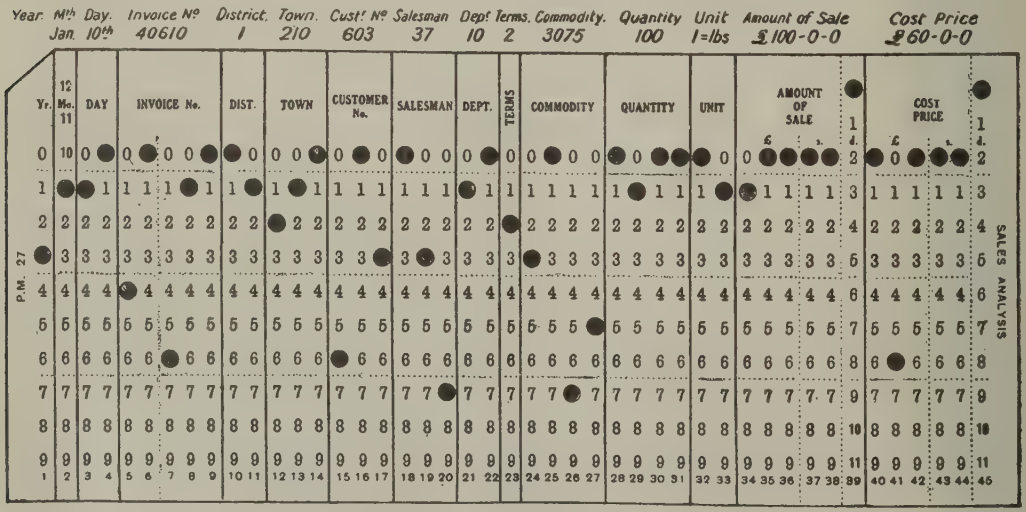
Vertical addition, combined with horizontal addition or subtraction, and the insertion of text, which represent the principal features of the adding typewriter, form part also of the Elliott-Fisher system. Instead, however, of sliding a carriage to and fro during the process of posting, the typewriter itself is moved from top to bottom or across the sheet of paper, which is clamped to a flat writing surface or bed. A series of totalizers (one for each column required), placed above the top edge of the bed, are then engaged and operated in turn as entries are made in the different columns on the paper. The advantage derived from the use of a flat writing surface, which is peculiar to this system, is twofold: firstly, entries can be made, if desired, in an ordinary bound book; and secondly, the manifolding or duplicating of several copies is greatly simplified. Thus, the posting and balancing of the ledger, and the preparation of customers' statements, can proceed simultaneously, resulting in a considerable saving of time, while for an invoicing system the—

Acknowledgment of order;
Customer's invoice;
Warehouse order;
Consignment note;
Traveller's advice;
Day Book sheet; and
Address label;

are produced with one writing; at the same time the total is built up for each order, the amounts analysed under departments, and totals accumulated for the whole of the day's business.

## (4) Sorting and Tabulating Machines—the Powers and Hollerith Systems.

In their initial and final stages, there is little difference in principle between these statistical appliances and adding machines. The depression of keys on the adding machine at once transmits the energy to the adding and printing mechanism;




"Powers" Tabulating Card.

with tabulating machinery this energy is, as it were, held in suspense for a time on a card, the positions of the digits which would be struck on a keyboard being represented by holes punched in the card (*see* Figure). In the final process of transcribing and totalling this information, and presenting it in the normal arrangement of a tabulated record (or providing readings on indicators, as with the non-listing type of adding machine), the function of the card is exactly similar to that of a Pianola record, where the depression of keys on the piano is regulated by perforations in a roll of paper. The vital difference to adding machine procedure lies in the intermediate stage, between the setting-up of the card by operating a keyboard, and the building up of various sets of statistics from these cards on another form of apparatus. Each card (as shown by the headings) carries the group of facts relating to one item or entry, the details as regards department, traveller's district, class of goods, etc., being represented, in each case, by a separate series of code numbers. The cards can then be classified, with great rapidity, under each of the headings in turn by passing them through an automatic sorting device, a process which would necessitate the constant re-grouping and listing of the original documents or records by any other method. The distinctive and ingenious feature of the whole system is contained in the dual and quite unrelated functions of the punched holes, those on the left of the card causing it to be carried to its proper destination in the sorting machine, while those on the right actuate the printing mechanism (when provided), and adding wheels, of a tabulating machine.

It is not possible, in a brief description, to do more than reduce these statistical systems to their elemental principles, to place them in comparison with other appliances, and to, perhaps, remove some apprehension that they are unduly complicated. The predominant factor is that the same set of figures can, with one writing, be studied from widely different aspects, an invaluable feature to a large business when, to mention but two examples, the trend of sales, or the allocation of costs, is under consideration.

## CHAPTER IV

# CALCULATING DEVICES

BEFORE passing to a description of machines, it should not be overlooked that, for some classes of work (e.g. calculations dealing with numbers of articles or hours at a fixed rate), a ready reckoner will often prove more effective than a mechanical appliance.

### Ready Reckoners.

Many publishers supply these books of tables, ranging from simple reckoners for wages or prices to the more intricate interest and sinking fund calculations. In the case of "Cotsworth's Tables," a direct reading can be obtained for the multiplication of any two numbers up to three figures each, and for larger numbers after a simple sum in addition, as shown by the following examples—

$$\begin{aligned} 428 \times 935 &= \text{Reading against position 428 in Table 935} \\ &= 400{,}180 \\ 428{,}617 \times 935 &= 428{,}000 \times 935 + 617 \times 935 \\ &= 400{,}180{,}000 \\ &\quad + 576{,}895 \\ &= 400{,}756{,}895 \end{aligned}$$

It will be obvious also, from the first example, that division can be performed with the same facility, for—

$$\begin{aligned} 400{,}180 \div 935 &= \text{Position in Table 935 which gives the reading } 400{,}180 \\ &= 428 \end{aligned}$$

or, conversely—

$$400{,}180 \div 428 = 935$$

The tables are therefore valuable for working out percentages or averages.

If none of the published books of tables meets requirements exactly, the construction of special copies is usually worth consideration. A typed ready reckoner, for occasional use only, can be greatly reduced in bulk by adopting the following decimal principle. Assuming that the headings represented yearly salaries, the tables would be grouped in the undermentioned order—

| | £ | £ | £ | £ | £ | £ | £ | £ | £ | |
|---|---|---|---|---|---|---|---|---|---|---|
| First group . | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | |
| Second ,, . | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | |
| Third ,, . | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| Fourth ,, . | 1s. | 2s. | 3s. | 4s. | 5s. | 6s. | 7s. | 8s. | 9s. | 10s. |
| Fifth ,, . | 11s. | 12s. | 13s. | 14s. | 15s. | 16s. | 17s. | 18s. | 19s. | |

The reading for a particular period on a basis of, say, £324 17s. per annum, would then be obtained by referring, with the aid of a side index, to the tables for £300, £20, £4, and 17s., in turn, and adding the results together. If each table occupied one page, the whole set of tables, with a range extending from 1s. to £900, could be compressed into a mere pamphlet of 24 leaves.

Time calculations are of frequent occurrence for various purposes. On p. 350 is a simple form of perpetual calendar giving a direct reading, which can be extended either backwards or forwards by adding to the years forming the headings of the columns; with most perpetual calendars, a preliminary reference to other tables is usually involved. Another useful form of table, for computing the number of days in given periods of time, is also illustrated. A consecutive number is entered against each date of

| | 1911. | *1912. | 1913. | 1914. | 1909. | 1910. |
|---|---|---|---|---|---|---|
| | *1916. | 1917. | 1918. | 1919. | 1915. | *1916. |
| | 1922. | 1923. | *1924. | 1925. | *1920. | 1921. |
| JAN. | S. 1 8 15 22 29<br>M. 2 9 16 23 30<br>T. 3 10 17 24 31<br>W. 4 11 18 25<br>T. 5 12 19 26<br>F. 6 13 20 27<br>S. 7 14 21 28 | S. 7 14 21 28<br>M. 1 8 15 22 29<br>T. 2 9 16 23 30<br>W. 3 10 17 24 31<br>T. 4 11 18 25<br>F. 5 12 19 26<br>S. 6 13 20 27 | S. 6 13 20 27<br>M. 7 14 21 28<br>T. 1 8 15 22 29<br>W. 2 9 16 23 30<br>T. 3 10 17 24 31<br>F. 4 11 18 25<br>S. 5 12 19 26 | S. 5 12 19 26<br>M. 6 13 20 27<br>T. 7 14 21 28<br>W. 1 8 15 22 29<br>T. 2 9 16 23 30<br>F. 3 10 17 24 31<br>S. 4 11 19 25 | S. 3 10 17 24 31<br>M. 4 11 18 25<br>T. 5 12 19 26<br>W. 6 13 20 27<br>T. 7 14 21 28<br>F. 1 8 15 22 29<br>S. 2 9 16 23 30 | S. 2 9 16 23 30<br>M. 3 10 17 24 31<br>T. 4 11 18 25<br>W. 5 12 19 26<br>T. 6 13 20 27<br>F. 7 14 21 28<br>S. 1 8 15 22 29 |
| FEB. | S. 5 12 19 26<br>M. 6 13 20 27<br>T. 7 14 21 28<br>W. 1 8 15 22 (29)<br>T. 2 9 16 23<br>F. 3 10 17 24<br>S. 4 11 18 25 | S. 4 11 18 25<br>M. 5 12 19 26<br>T. 6 13 20 27<br>W. 7 14 21 28<br>T. 1 8 15 22 (29)<br>F. 2 9 16 23<br>S. 3 10 17 24 | S. 3 10 17 24<br>M. 4 11 18 25<br>T. 5 12 19 26<br>W. 6 13 20 27<br>T. 7 14 21 28<br>F. 1 8 15 22 (29)<br>S. 2 9 16 23 | S. 2 9 16 23<br>M. 3 10 17 24<br>T. 4 11 18 25<br>W. 5 12 19 26<br>T. 6 13 20 27<br>F. 7 14 21 28<br>S. 1 8 15 22 (29) | S. 1 8 15 22 (29)<br>M. 2 9 16 23<br>T. 3 10 17 24<br>W. 4 11 18 25<br>T. 5 12 19 26<br>F. 6 13 20 27<br>S. 7 14 21 28 | S. 6 13 20 27<br>M. 7 14 21 28<br>T. 1 8 15 22 (29)<br>W. 2 9 16 23<br>T. 3 10 17 24<br>F. 4 11 18 25<br>S. 5 12 19 26 |
| MAR. | S. 5<br>M. 6<br>T. 7<br>W. 1<br>T. 2<br>F. 3<br>S. 4 | | | | | |

In Leap Years (marked * ) January and February are read from the first, and the remaining months from the second column carrying the year.

a two-year calendar, commencing with 1 on the 1st January for the first year, and ending with 730 on the 31st December of the second year. The number of days in any period is then obtained by taking the reading for each date, and deducting one from the other, a preliminary addition of one

| Date. | *No. of days.* | Date. | *No. of days.* | Date. | *No. of days.* |
|---|---|---|---|---|---|
| Jan. 1 | *1* | Feb. 1 | *32* | Mar. 1 | *60* |
| Jan. 2 | *2* | Feb. 2 | *33* | Mar. 2 | *61* |
| Jan. 3 | *3* | Feb. 3 | *34* | etc. | |
| Jan. 4 | *4* | Feb. 4 | *35* | | |
| Jan. 5 | *5* | Feb. 5 | *36* | | |
| Jan. 6 | *6* | Feb. 6 | *37* | | |
| Jan. 7 | *7* | Feb. 7 | *38* | | |
| Jan. 8 | *8* | Feb. 8 | *39* | | |
| Jan. 9 | *9* | Feb. 9 | *40* | | |
| Jan. 10 | *10* | Feb. 10 | *41* | | |
| Jan. 11 | *11* | Feb. 11 | *42* | | |
| Jan. 12 | *12* | Feb. 12 | *43* | | |
| Jan. 13 | *13* | Feb. 13 | *44* | | |
| Jan. 14 | *14* | Feb. 14 | *45* | | |
| Jan. 15 | *15* | Feb. 15 | *46* | | |
| Jan. 16 | *16* | Feb. 16 | *47* | | |
| Jan. 17 | *17* | Feb. 17 | *48* | | |
| Jan. 18 | *18* | Feb. 18 | *49* | | |
| Jan. 19 | *19* | Feb. 19 | *50* | | |
| Jan. 20 | *20* | Feb. 20 | *51* | | |
| Jan. 21 | *21* | Feb. 21 | *52* | | |
| Jan. 22 | *22* | Feb. 22 | *53* | | |
| Jan. 23 | *23* | Feb. 23 | *54* | | |
| Jan. 24 | *24* | Feb. 24 | *55* | | |
| Jan. 25 | *25* | Feb. 25 | *56* | | |
| Jan. 26 | *26* | Feb. 26 | *57* | | |
| Jan. 27 | *27* | Feb. 27 | *58* | | |
| Jan. 28 | *28* | Feb. 28 | *59* | | |
| Jan. 29 | *29* | Feb. 29 | | | |
| Jan. 30 | *30* | | | | |
| Jan. 31 | *31* | | | | |

day (or two, if necessary, in Leap Years) being made to the second reading, if both dates have to be included in the calculation. The advantage of a table of this description is that it is compact and self-explanatory : the arrangement may seem obvious, but is not always remembered.

## Calculating Machines.

A calculating machine will perform addition, subtraction, multiplication, and division ; the three last-named processes are, however, only extensions of the adding function, as will be seen from the following outline, which indicates the methods of operating machines (e.g. the Comptometer or Burroughs Calculator) equipped with keys—

1. *Addition.* The procedure has already been described in connection with non-listing adding machines (Chap. 2).

2. *Subtraction* is effected by substituting the complement of the number to be deducted, and adding it to the first number. The complement of a number is determined by adding enough to each digit, commencing from the left, to make 9, except the last digit, to which enough is added to make 10; thus the complement of 1,807 is 8,193, and subtracting 1,807 from 2,948 is equivalent to adding 8,193 to 2,948 (the first figure of the result, in the latter case, being ignored). This illustrates the principle. All machines with either a ten-key or "full" keyboard, giving calculating facilities, have the complement shown by a small figure on each key (*see* the "Sundstrand") and, after the insertion of the first number in the usual manner, the actual number to be deducted (less 1) is, in practice, struck by a direct reading of the smaller digits, thus automatically registering and adding the complement. No one would use a machine for making isolated subtractions, but it is sometimes convenient to include the process when forming part of other calculations.

3. *Multiplication* is regarded as cumulative addition, and the method of working the calculation 456 × 372 is shown by the diagram below, the representation of the centre of the keyboard indicating the digits used at each stage.

KEYBOARD

*First position—*

| | | |
|---|---|---|
| 6 6 6 6 6 ⑧<br>5 5 5 5 ⑤ 5<br>4 4 4 ④ 4 4 | 456 depressed twice (i.e. added) | 456 × 2 |

*Second position—*

| | | |
|---|---|---|
| 6 6 6 6 ⑧ 6<br>5 5 5 ⑤ 5 5<br>4 4 ④ 4 4 4 | 4560 do. 7 times = 4560 × 7 or | 456 × 70 |

*Third position—*

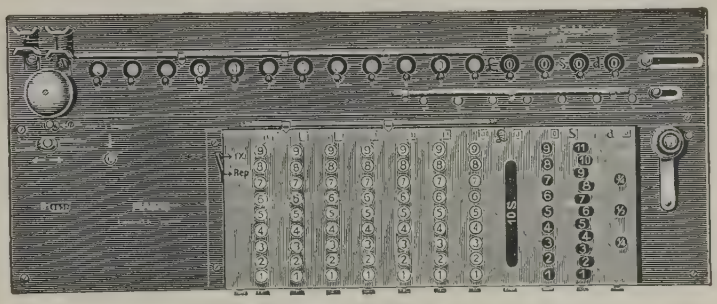
| | | |
|---|---|---|
| 6 6 6 ⑧ 6 6<br>5 5 ⑤ 5 5 5<br>4 ④ 4 4 4 4 | 45600 do. 3 times = 45600 × 3 or | 456 × 300 |

**Final result, as shown on adding wheels at base of machine = 456 × 372 = 169,632**

The manipulation of the keyboard has, in this case, been described in some detail to illustrate the rapidity of the process, the requisite number of depressions (both hands being used), and successive movements to the left, occupying a few seconds only.

4. *Division* is simply cumulative subtraction, i.e. in dividing 72 by 8 we are ascertaining how many times 8 can be deducted from 72, and it is on this principle that the machine is operated.

Training and practice are required before full value can be extracted from the key-driven calculating machine, the greatest advantage being gained, as previously explained in connection with adding work, when "touch" methods are employed; but the appliance usually leads in point of speed (with manual working) when these conditions are satisfied. Another, and entirely separate, class of machine is operated by setting markers on a series of scales against the figures forming the basis of the calculation, or selecting



THE MADAS CALCULATOR.

by sight and depressing keys, and then turning a handle (or crank). Working is obviously not so rapid as with the purely "touch" and key-driven machine, but the appliance has a greater field of utility, when calculations are only intermittent, because the manipulation is more quickly grasped, and the machine can therefore be used by a greater number of persons. The ARITHMOMETER is a typical example of this form of machine, other makes dependent on a crank movement being the TIM BRUNSVIGA and REMA PORTABLE. A further class, operated with both crank and keys, combines the advantages of both the former types, the models falling within this group being the MADAS CALCULATOR, MONROE, and MILLIONAIRE; the crank movement is, in the latter case, imparted by electric power, and the calculation is almost instantaneous.

## CHAPTER V

## APPLIANCES FOR COUNTER WORK

To the uninformed the cash register is merely a till for coin and notes, with a device which displays the amount of the purchase. This, however, is only its primary objective, and, just as the adding machine has been merged into the accounting machine, so the cash register is entitled, by reason of its recording facilities, to rank itself among the latter class of appliances. Although many of its functions are similar, the register differs from the adding machine in that the

creation of the accounting record, for either the departmental store or the small retailer, is coincident with the receipt and acknowledgment of cash, thus enabling the salesman, without any additional effort, to combine his own duties with those of a cashier and book-keeper.

## The National Cash Register.

There are many different models of the recording type of cash register, and their operation will, as in the case of the adding machine, be analysed so that the prospective user can arrange for a combination of those features which appeal more strongly to him.

Receipt of Cash. 1. Each assistant has his own cash drawer controlled by a lettered key (A, B, C, etc.) personal to himself.

2. The depression of this key opens the drawer, and at the same time rings a bell. Bells differing in tone are connected with the respective drawers, and tampering with the cash of another assistant is thus impossible; on withdrawal from the counter, the assistant can make his key inoperative.

Adding. 1. Adding wheels show the number of transactions and amount proper to each assistant (the latter checks the contents of the cash drawer).

2. Other adding wheels total the items according to the nature of the transaction, i.e. under the heading of Cash Sales, "Received on Account," etc., or class of goods, or any other desired classification. The number of items in each of these groups is also counted.

3. Yet another adding wheel totals in cash receipts; this reading can, if necessary, be kept secret.

Recording. 1. Full particulars of each transaction (including a consecutive number, which is given automaticaliy) are printed on a roll of paper. Unlike the adding machine, however, this record is kept locked in the machine, and cannot be controlled by the assistants.

2. A ledger card, or other record, can be placed on a sliding platform for the insertion of a duplicate impression of the item appearing on the roll of paper. This is equivalent to machine posting, with a tally roll of all the entries. In addition to the consecutive number, a selected number, e.g. for a book or card presented by the member of a co-operative society, can also be entered on the record.

Acknowledging Payment. 1. The amount of the purchase is shown publicly on an indicator.

2. A dated receipt in the form of a ticket (duplicating the entries on the roll of paper) can be printed and issued.

3. Alternatively, the sales-slip or invoice can be placed on a platform, and duplicate impressions (apart from the entry on the roll) inserted simultaneously, one on the upper portion of the form for retention, and the other on the invoice itself for handing to the customer, the stamped impression acting, in this case, as a receipt. The two portions of the form can be separated by hand along a perforated line, or the machine will cut off and store the upper section; the detached slip is for posting to the ledger when this work is not performed directly by the register.

The system as a whole is therefore astonishingly complete and self-contained. The depression of a few keys at the moment of each transaction—

Totals the cash receipts for each assistant, and the combined cash for the day;

Shows the number of sales made by each assistant, and the total output for the day;

Classifies and aggregates the form of business done;

Records (if necessary) the transaction on the account of the customer;

Supplies the customer with a receipt (showing assistant, classification, amount, date, and a consecutive number);

Prepares a tally-roll duplicating the entries on the receipts.

The balancing of one record against another is therefore unnecessary, since all the functions described above are interlocking, automatic, and operated by one writing on the keyboard.

A typical National Cash Register is illustrated in Section 16 (Organization and Routine of Office and Warehouse).

## The N.C.R. Credit File.

The keeping of accounts for credit customers is probably regarded by the smaller retailer as one of the most troublesome features of his business. The posting of Day Book and Ledger is apt to fall into arrear and, in times of pressure, there is the

NEWCOMBE & GREEN,
100 Central Street,
Totnes.

*4th May*, 1923.

Name: *Mrs. Owen.*
Address: *Hope Sq.*
Assistant: *M.N.*

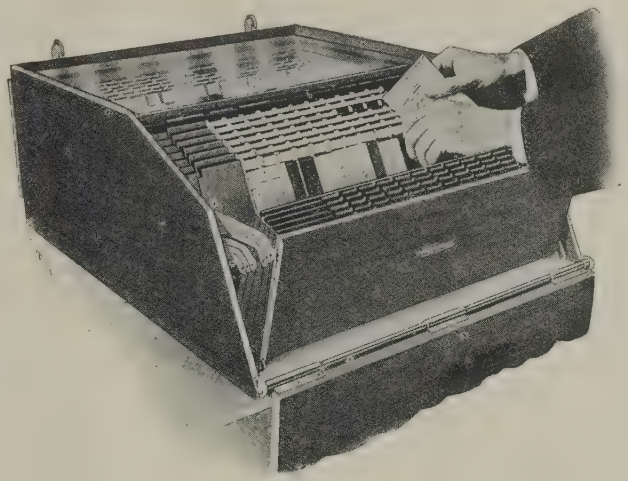
| | | £ | s. | d. |
|---|---|---|---|---|
| | Account forwarded . | | 10 | 6 |
| | *Goods* . . . . . | | 2 | 5 |
| | | | 12 | 11 |
| | | | | |
| | | | | |
| | | | | |

danger that the initial record may not be made at all. The state of the account is only brought before the customer at certain fixed periods, and clerical errors are liable to remain undetected until this stage is reached, leading to disputes and perhaps loss of business.

To meet these difficulties, the National Cash Register Co. have devised an appliance, or rather a system, which eliminates all book-keeping, yet enables the salesman to hand an up-to-date statement to the customer after each new transaction. The basis of the system is the form of invoice or sales-slip given on the previous page.

The form is prepared in duplicate, and a carbon copy retained; this is merely following the practice, now becoming general, of filing a duplicate of the invoice as the Day Book leaf. A distinctive feature of the slip, however, is the provision of a space for bringing forward the charge outstanding, and the instant supply of this figure forms one of the principal functions of the Credit File.

The file is arranged on the vertical system, but instead of pressboard guide cards and folders, is constructed wholly of metal guides, which work on hinges at the base of the file. A set of metal flaps, arranged in overlapping order, and attached by means of spring hinges, runs across the face of each guide from left to right; these flaps are provided for retaining the individual sets of sales slips in position, a sufficient distance being allowed between each flap for the exposure of the figure column on the slip. The name of the customer is typed or written on a small card, which is inserted in a ticket-holder at the head of each flap, thus acting as a tab, and successive sale-slips are filed by lifting the appropriate flap, and allowing it to spring back into position again when the slip has been placed beneath it. From the illustration it will be seen that the file is divided into two sections, the front section, accessible to the salesman, being reserved for the records of credit sales effected during the day, while that to the rear, protected with a glazed and locked cover, contains the corresponding records for past transactions. Each guide, with its row of invoice clips, provided for the salesman, has thus its counterpart at the back of the file, and as these twin guides are linked together with connecting rods or bars, any movement of guides necessary when selecting the position for a current slip, is reproduced exactly in the rear. The method of procedure will now, probably, be clear. The amount outstanding is first read from the edge of the last sales-slip clipped in the guide at the back of the file, and then inserted on the slip in course of preparation; the arrears are thus brought to the notice of the customer at each transaction, instead of through the medium of a monthly statement. At the end of the day, the proprietor unlocks the back portion of the file, and transfers to it the carbon duplicates of the sales-slips for the day; this represents the whole of his "book-keeping," and the position as regards every credit customer can be visualized in a few minutes. The relative sales-slip would, of course, be withdrawn on receipt of a payment on account, and a combination of the cash register and credit file operations can be arranged quite easily, if desired. The underlying principles of both systems are alike, i.e. that final records keep pace with individual sales.



The N.C.R. Credit File.

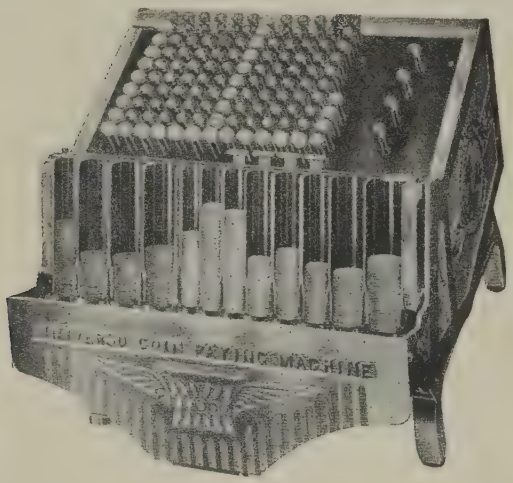
## The Burroughs "Retail" Machine.

This machine, illustrated on page 345 has already been described in connection with the adding work of an office. Where several articles are purchased at one time by the same person, and it is not customary to prepare an invoice, bill, or sales-slip, it is a distinct advantage to be able to list the individual prices on the machine, and hand the printed slip to the customer. Liability to error is always present when totalling the amount of the purchase from an inspection of the goods, whereas the accuracy of the addition is assured, and mental effort reduced to the minimum, if a small Burroughs machine of the type mentioned is used; moreover, the purchaser, being satisfied, will be dealt with more speedily. The machine would also be available at the end of the day for performing other classes of adding work.

## The Brandt Automatic Cashier.

Attention has been devoted, so far, to machinery which will either print some form of record, or present the figures required on an indicator; in the case of the Brandt Automatic Cashier a

keyboard, exactly similar to those used with the various appliances already described, is operated solely for the purpose of delivering coins of different values to make up a given amount. Machines of this type are not new, but they have failed, hitherto, to gain any great measure of popularity, because it was necessary to strike a separate key for each coin required. The unique feature of the recently introduced model, shown below, lies in the fact that the combination



Brandt Automatic Cashier.

of coins, representing any given amount from 1d. to 9s. 11d., is supplied automatically by depressing a *single* key. Including the key for ½d. (the only one operated separately), there are 120 keys for delivering, in coin, any amount below the present Currency Note minimum of 10s., and the advantage of eliminating both the mental and physical selection of coins, when quick payment is essential, will be obvious. It will be seen from the illustration that the different values or denominations are stacked in a magazine on the front of the machine, and the striking of the key representing the amount required actuates a series of plungers, which push the bottom coin from each of the appropriate stacks on to a shoot for immediate delivery into the hand of the operator. There are two different models, which vary slightly in function. The first, called a "change-giving" machine, supplies the change due for any payment up to 10s.; e.g. if three half-crowns are received in respect of a purchase of 5s. 11d., one of three small bars representing the amount tendered (up to 2s. 6d., 5s., or 7s. 6d. and over) is touched, the key for 5s. 11d. depressed, and the correct change (1s. 7d.) is then delivered. The second model is perhaps better because the action is direct, i.e. if the key marked 5s. 11d. is depressed, that value is supplied in coin; this system is appropriate for supplying rapidly the "odd" amount of coin required in wages payments, or for dropping into pay envelopes the balance due after the notes have been inserted. For the latter method of payment, the makers claim that one operator, with the machine, can keep pace easily with four persons handling the notes. The combination of coins for making up any given amount will, naturally, always be the same when using the machine, and a set of tables can be provided showing, on the basis of the pay-roll total, the coin and notes required under each denomination.

## CHAPTER VI

## DUPLICATING PROCESSES

Apart from printing, the work of reproducing copies of text or figures may be divided into three groups, viz.—

1. The creation of a few duplicates by means of a carbon or composition process.

2. The duplication, in bulk, of a considerable quantity of circulars, instructions, forms, price lists, etc., where a fixed number of copies would be produced at one time, and the process regarded as finished so far as the particular piece of "copy" in use was concerned.

3. The repetition, as often as desired, of single copies of a series of titles, headings, names and addresses, and similar brief information.

With few exceptions, the medium of reproduction now in general use for the bulk of this work is the typed stencil cut on a waxed sheet of paper, through which ink is passed to produce the copy. It will be seen that this is true as regards the majority of appliances for duplicating typewriting, or for addressing purposes, while the same principles are observed with the Multistamp, which is replacing the rubber stamp, and the Diagraph, which cuts oil-board stencils for addressing crates and parcels. The method of operation with many of these duplicators, particularly for typewriting, is now so well known, and their functions are so much more circumscribed than the appliances previously referred to, that a detailed analysis of their working need not, and indeed could not, be given in this short article; sufficient particulars will, however, be supplied to enable the reader to select the style of apparatus most suitable for the class of copying he has in view. As regards workmanship, it should be borne in mind that results will generally prove to be unsatisfactory if, as often happens, the work is merely passed over to a junior, without adequate instruction and supervision; in fact, it is a point whether some of these processes should be entrusted to the junior

at all, unless one is assured that some interest will be taken in the quality of the copies produced.

## Clay Copiers.

A composition duplicator is still an excellent medium for the reproduction of plans, sketches, and typed matter in small quantities, or for use where two or three different colours are required. This method is a modern version of the old Hektograph process, a composition of china clay, moistened with glycerine, being substituted for the gelatine formerly in use; beyond this there is no change, the "copy" being prepared as before with an aniline ink, and transferred to the surface of the composition, from which duplicates are taken until the ink is exhausted.

## Carbon Copying.

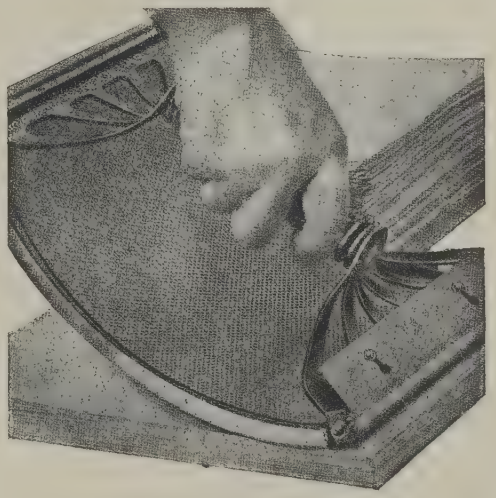
Carbon duplicating, although one of the earliest methods for producing copies of documents, has become prominent again in recent years as a means for reducing clerical labour with invoicing systems, a single writing or typing of the items included in a particular transaction being sufficient for setting up the original invoice, various forms of advice and instruction, and the primary accounting record (as described earlier in connection with the Elliott-Fisher book-keeping machine). The only variation from the normal procedure in what is known as the "Carbotyp" system is that, instead of collecting a few forms together with a sheet of carbon paper placed between each, these forms are bound together into a set, and interleaved, as before, with carbon sheets. The binding medium is called a "stub"; this is a narrow strip marked off (in the case of an invoicing set) along the top of each form by means of a perforated line, and as the stubs are attached together by paste instead of wire, the thickness of the set of forms is uniform throughout, and presents no difficulty as regards insertion in the typewriter. The stub is, of course, torn off when the forms are ready for distribution. The chief advantages peculiar to this system are—

1. Unlike loose sheets, the exact "register" of the items in the appropriate spaces on each form is a matter of certainty.
2. To overlook one of the forms required in the series is impossible.
3. The different forms in the set can, if necessary, be varied in size and colour.
4. Any correction of the top copy is automatically reproduced on those beneath. The whole of the forms in the set can, similarly, be signed in one operation.

Another method of using the Carbotyp system is for the top sheet to consist of a set of four or more cheques, behind this a sheet of remittance vouchers for enclosing with the cheques, and lastly, a ruled Cash Book sheet for insertion in a loose-leaf binder. Each cheque and remittance form can be detached separately without disturbing the remainder, and an exact agreement between the cheques and Cash Book entries, resulting in a correct bank balance, is then assured. Cash receipts can be treated in a similar manner, the respective pages for interleaving with carbon paper being a sheet of tear-out receipts, the bank paying-in slip, and the Cash Book leaf as before.

## Stencil Duplicators.

Stencil duplicators, in their earlier form, were "flat" in pattern, i.e. the stencil is stretched on a hinged frame, which is lowered to the surface of the sheet of paper, and an inked roller passed over the stencil to produce the impression. Where



The Swiftograph Duplicator

typed matter has to be inserted on printed forms, this method of duplicating is still essential, but the rate of working is slow, and the appliance has now been replaced by the rotary machine, unless the number of copies required is quite small.

Midway between the flat and rotary duplicators comes the Swiftograph, a simple piece of apparatus which, as will be seen from the illustration, is manipulated in much the same manner as a curved blotting pad. The inking arrangement is similar to that used with the rotary machine, i.e. the stencil is stretched over an ink-charged pad, and the small user thus enjoys one of the advantages of the more expensive appliance. The rate of output is limited only by the speed at which the Swiftograph can be "rocked," by hand, across the successive sheets of paper.

Although similar in principle as regards construction, the MULTISTAMP is designed more with the object of supplying the user with a small hand-stamp, on which the inscription can be

PATENT
MULTISTAMP
Actual size of the stencil space is. 3½" x 1" taking five typewritten lines.
Stencils Can Be Filed Away for future Use

THE MULTISTAMP.

varied at will. The wording required is typed, or even written by hand with a stylus, on a small stencil supported in a cardboard frame, which is slipped into position below an inked pad. The necessary impressions are then made, and the stencil filed away until again required for use. As will be seen from a later description, there are distinct points of resemblance between this inexpensive device and the addressing machine, although the Multistamp would not be suitable for producing single, and successively different, copies at one time.

The rotary duplicator carries the stencil on an inked drum, which can be revolved either by hand or, when speed is a vital factor, by an electric motor. Some further points of superiority over other methods of duplicating are—

(*a*) With one class of machine (the GESTETNER) the ink is conveyed to the drum automatically.

(*b*) If a form is being prepared for carrying manuscript entries, necessitating the use of a less absorbent paper, a blotting sheet is, in the case of another machine (the RONEO), interleaved between each of the copies.

(*c*) The machine is self-feeding as regards the supply of paper.

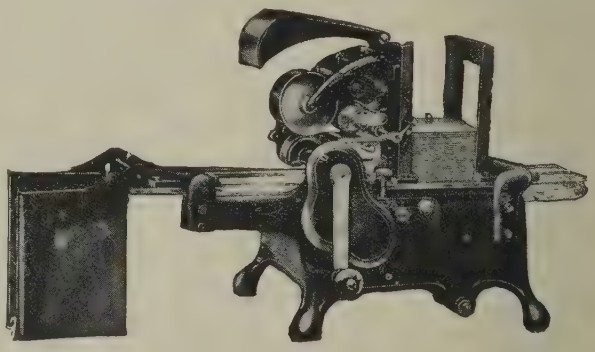
## Type-Setting Duplicators.

These are somewhat similar in action, as regards the process of printing, to the rotary machines, a revolving drum being used in each case, but the stencil is replaced by metal type, which is transferred, semi-automatically, from a fount set in juxtaposition to the drum. The installation of a machine of this character would only be justified where a considerable number of copies is required frequently and urgently, in which case economy in cost of production can undoubtedly be effected with work which, otherwise, would be sent to the printer.

Although few small traders will find sufficient work to justify the installation of an electrically-operated machine for printing labels, stock tickets, etc., mention should be made of the PRINTATOR which will be found of great use to large firms, as it prints 3,600 tickets, etc., per hour in one or two colours at one operation, the tickets being also numbered, perforated or punched, and stacked ready for use.

## Addressing Machines.

To regard an addressing machine, by inference from its name, as merely suitable for preparing batches of envelopes in connection with a fairly constant group of customers, is taking a very restricted view of its capabilities. The principle of operation is for a series of small, name-bearing, plates or stencils to pass automatically into a printing position, where an impression can be made on an envelope, card, or sheet of paper, at any point desired ; the size or shape of the medium receiving the impression is therefore immaterial. This indicates the primary object of what is, in

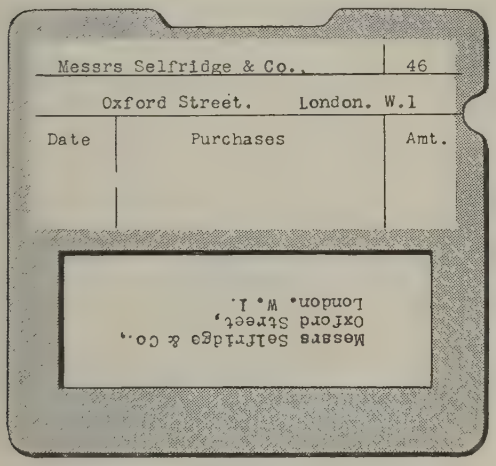


RONEO ADDRESSING MACHINE.

effect, a duplicating appliance, but, like the adding machine, the initial functions can be expanded in many directions, according to local requirements. For descriptive purposes, the latest model of the RONEO ADDRESSING MACHINE, which has been designed for the small user, will be taken as a typical example. The names, headings, or titles,

to be used are typed on to separate stencils constructed of tough durable material, and each stencil is fixed in a strong press-board frame. The framed stencils are then stacked above the body of the machine, as shown in the illustration, and, on turning the handle, are passed to the hopper on the left, after the individual impressions have been made, the rate of output being well over 1,000 impressions per hour.

Used in this manner, the machine offers obvious advantages for addressing circulars, price lists, invoices, and labels, relating to regular customers, or for inserting names and numbers on workmen's pay envelopes. A point which is not always appreciated in this connection is that the set of typed envelopes, or labels, need not be created a moment before they are actually required, a considerable advance over the old wasteful practice of keeping a printed supply for each name, and then building up the set by withdrawal of single copies from stock. But the insertion of a




RONEO ADDRESSING MACHINE STENCIL.

*rota* of names by this means need not stop at envelope printing. The customer's invoice, or the workman's time-card, and, tracing this listing work yet another step, the ledger sheet and statement, or the weekly pay-roll, can all bear a corresponding impression. The same line of thought can be pursued as regards the notices, dividend warrants, and central records, of the public company, or the renewal notices, bonus issues, and policy lists of the insurance company, i.e. as soon as a stencil has been prepared, the writing of that name and address by hand should not be necessary in any circumstances.

Consideration has been given, so far, to the manifold uses to which the printing process can be applied, but an entirely different side of the question, which has recently been developed, is the utility of the stencil for purposes other than printing. It has, for long, been recognized that the stencils or plates of an addressing machine represent, in themselves, an index, since they are filed away, when not in use, on exactly similar lines to a card record. A system analagous to the "signal" on a card is, in fact, employed with these addressing accessories, since particular stencils can be earmarked under districts, trades, travellers, etc., and selective printings made by automatically skipping the names where necessary. It is, therefore, but logical to avoid the duplication of records by making provision on the stencil frame for the insertion of particulars which, otherwise, would have to appear on a separate index. As shown in the illustration, this has been carried out effectively, in the case of the Roneo machine, by enlarging the upper portion of the stencil frame; and not only this, for the maximum value of the appliance has been extracted by affixing, to the upper portion of the frame, an adhesive label bearing an impression of the name on the stencil.

Such, then, are the possibilities of this device, which is content to call itself an addressing machine. For larger users, the ELLIOTT or ADDRESSALL machines are perhaps preferable, because a motor attachment can be connected with the printing mechanism, thus facilitating a long or continuous output; but the stencil is again the basis of each of these systems. With the ADDRESSOGRAPH machine, however, an embossed metal plate takes the place of the stencil, and the use of ink is eliminated by printing through a ribbon. One feature of economy gained with the Addressograph is that the name and address on the plate can be flattened out, and fresh particulars inserted. A tin-plate frame which holds the embossed plate can be used for indexing purposes, thus comparing favourably, in this respect, with other systems.

## CHAPTER VII

## PROTECTIVE DEVICES

THE fraudulent manipulation or alteration of instruments of payment, such as cheques, dividend warrants, and the like, which is not so infrequent as is generally supposed, has led to the creation of a class of machine for checkmating the different phases of this form of activity. The possibilities of fraud with this type of document may be divided into three categories—

1. The production of counterfeits.
2. A second payment on the same document.
3. Alteration to a higher figure of the amount payable.

There is, of course, the further class of case where the issue of a perfectly genuine form of payable order is fraudulent, but the safeguards here relate to accounting principles, with which we are not at present concerned.

## Counterfeits.

The first category is not one which primarily affects the average business house, but relates rather to the placing of counterfeit bank or currency notes in circulation. Some safeguards are the use of water-marked paper, and a slight but secret re-arrangement of the printing at each fresh issue; the expensive plant required for producing counterfeits usually, however, acts as a deterrent.

It may be of interest to know that note issues in the United States have been protected by means of code letters. The notes are printed, eight on a sheet, and, in addition to the serial number, one of the letters A, B, C, or D, is assigned to each. If the letter "A" appears on the note, the division of the last two figures in the serial number by 4 should give a remainder of 1, if "B," a remainder of 2, if "C," a remainder of 3, while no remainder should coincide with the use of the letter "D." The counterfeit can then be detected at sight by those in authorized possession of the code, which can be varied at intervals by altering the commencing numbers and sequence of letters.

## Cancelling Devices.

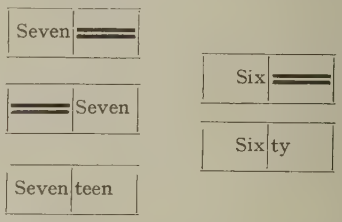
The second category would apply to cases where some simple form of refundment order or credit note was in use. It is obviously important that these should be effectively cancelled when cashed. The removal of handwriting, or even the impression from a rubber stamp used for this purpose, is fairly simple, and a better plan is to employ one of the various devices which perforates the word "Cancelled," or boldly stamps out the word "Paid," on each of the documents. The forms can then be dealt with in batches, resulting in an appreciable saving of time, and the abstraction, by a dishonest employee, of one or more of the forms from the stored bundles, with a view to reclaiming the value, is then obviated.

## Prevention of Figure Alterations.

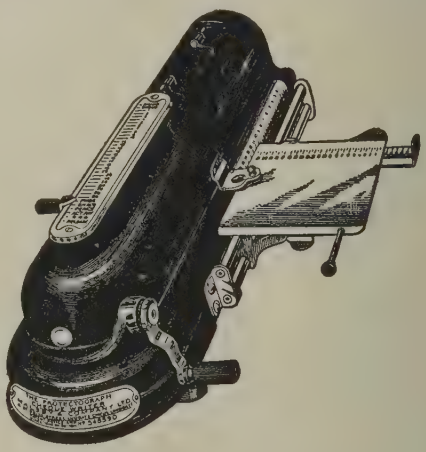
The final category represents a potential source of danger with every cheque written by hand. From the few examples given below, it will be seen that, if care is not exercised in spacing the writing of both words and figures, it requires no skilful penmanship to make the additions shown in brackets—

| | £ |
|---|---|
| FOUR(TEEN) | (1)4 |
| SIX(TEEN) | (1)6 |
| SEVEN(TEEN) | (1)7 |
| TWENTY(NINE) | 20 (29) |
| EIGHT(Y) | 8 (0) |
| NINE(TY) | 9 (0) |

If payments of this nature are not made on any extensive scale, a suitable reminder and safeguard, as regards the amount written in words, might be arranged by providing a kind of double "box" for the £ denomination, as shown under—




The rule would then be to spread any word representing a two-digit figure across the two spaces provided, or, if a single digit word only was required, to cancel one of the spaces with a thick double-line. This might prove adequate as regards removing temptation from one's own employees, but would not present any serious difficulty to the professional cheque-raiser. There is a common misapprehension that a cheque, once crossed, can be safely entrusted to any of the ordinary and unprotected channels of conveyance, while another popular belief, which is equally erroneous, is that the colour-band on which the amount is written will at once betray any tampering with the entry. It is true that this background



Protectograph Cheque Writer.

is printed, in microscopic type, with what is known as fugitive ink, which disappears under chemical treatment long before the writing can be erased; but the skilful forger can soon replace any gaps in the band with the aid of suitable colouring matter, which will escape all but the closest scrutiny. The only means, therefore, of defeating

these practices is to carry out the writing in such a manner that one can be assured that each entry is absolutely indelible, and this can be effected by using a simple appliance called the PROTECTOGRAPH CHEQUE WRITER. The loose cheque is placed on a small platform shown on the right of the illustration, and a pointer is moved with the left hand up and down a scale, indicating amounts, at the top of the machine. The writing then proceeds by giving, with the right hand, one revolution to the handle at the base of the machine for each of the words in the amount to be entered, the cheque moving automatically to the left with each revolution. A facsimile reproduction of the entry, as it appears on the cheque, is shown below, the amounts being printed in red, and the

***TEN POUNDS FIVE SHILLINGS ELEVEN PENCE

denominations (pounds, shillings, and pence) in black. The outstanding feature of the whole operation lies in the fact that the machine does not give just a surface printing, but, by means of a special form of type, crushes the entry with indelible ink into the very fibres of the paper; that is, every cheque is practically *embossed* with the amount which is payable. The possibility of forging additional letters by "stabbing" the paper with a pen point is eliminated by the automatic spacing device, and a preliminary printing of three stars, as shown in the illustration, protects the opening portion of the entry. In view of the previous observations made regarding the ease with which pen and ink entries can be removed from the paper, it will be realized that, although the amount payable is amply protected, there is still an opening for fraud as regards the name of the payee, and the mode of payment. That is to say, if the name of the payee is changed to "Bearer," and the crossing eliminated, the Protectograph inscription will not prevent payment, when the cheque is presented, if the alteration has been carried out with any degree of skill. This point has naturally not been overlooked by the makers, and the machine will place a crossing with the words "Not negotiable" or "Account Payee only" on the cheque by the same method of shredded printing used for the insertion of the amount. It might be wondered in what way this device is connected with labour-saving; the answer is that, as each turn of the handle prints a complete word, e.g. "seventeen," the operation is clearly more rapid than writing with a pen. Another form of Protectograph writer, equipped with the same kind of type, prints a limitation clause on the face of the cheque, e.g. "Not Over Ten Pounds."

A similar type of machine is the Safe-guard Writer, only in this case the words are printed diagonally, and immediately below one another, across the face of the cheque, and large amounts can, by this means, be included in a single line. The space containing the name of the payee is, at the same time, shredded, and a complete protection of the document is provided in one operation.

## CHAPTER VIII

## TIME RECORDERS

THERE are many machines on the market which, controlled by a clockwork movement, will stamp the exact minute, hour, and even the date, on a card or roll of paper, and the advantage of a mechanical device which gives a thoroughly reliable record of the arrival and departure of the staff, or the time occupied on a particular job, need not be elaborated. The mechanical principles of all these devices are precisely the same throughout, viz., in addition to an ordinary clock (which is a fixed dial, with revolving pointers or hands) a set of wheels carrying type on their edges to represent, in the first place, the hours and minutes (and thus analagous to the dial) are revolved in unison with the clock, and by taking a *print* from the wheels at a suitably fixed point, it will be obvious that the impression obtained will correspond to the *reading* given by the dial. The mechanical function of the type-bearing wheels is, however, carried beyond the stage reached by the clock, in that the day of the week and the month can also be printed if desired, while the arrangement of the impression obtained will indicate whether the time is a.m. or p.m.

Starting from this preliminary basis, it will now be shown, in order of progress, how ingeniously this simple time-recording facility has been adapted to meet the varied requirements of practical business procedure.

### Blick Autograph Time Recorder.

The Blick Autograph Time Recorder is intended primarily for the staff of an office, and can either stand on a table or be affixed to the wall. Each member of the staff, on arrival or departure, depresses the small lever shown on the left of the clock case. This action immediately stamps the time on a roll of paper contained below the surface of the writing slope at the base of the recorder and, at the same moment, uncovers an aperture in this slope, so that the signature can be given on the roll directly opposite the stamping. This is a considerable advance over earlier models, where the time-stamping occurred after the signature had been given, the movement of the lever for this purpose also exposing a fresh portion of the roll for the next arrival. It will be seen, therefore, that the time-stamping against the first signature might not be given until a second

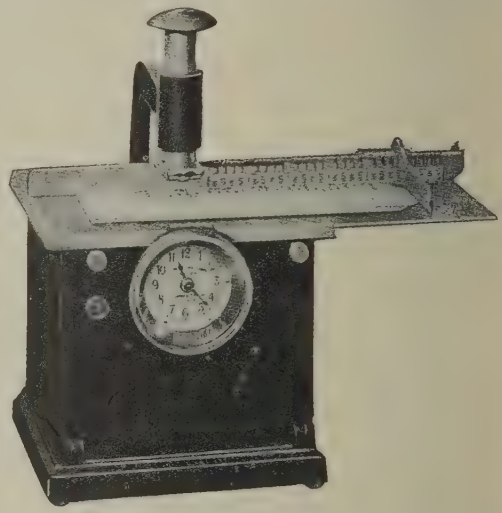
signature had to be inserted, a serious defect if certain sections of the staff were due to arrive at half-hourly intervals, and the latest member of one of the sections wished to avoid recording his time of arrival by pleading forgetfulness in operating the lever. Each roll of paper will take from 1,000 to 1,200 signatures, and the day (Monday, etc.), as well as the time, is stamped against each entry, thus : M **8** 49.

Blick Autograph Time Recorder.

A more compact and less expensive form of the above-mentioned recorder is shown in Chap. I, of Section 14: (Some Practical Suggestions for the Shop, Office, and Warehouse).

## Blick Time Stamp and Blick-Universal Recorder.

Ascending the scale of utility, the next appliance to be described in the Blick Time Stamp, and the associated model, the "Blick-Universal" Recorder, the simple design of which can be judged from the illustration. For stamping letters, telegrams, telephone messages, etc., the document is laid on the platform above the clock, and the plunger depressed, the time impression being conveyed by the type-wheels carried in the body of the appliance. In addition to printing the time and date, the name and address of the firm or other particulars, and the word "Received," "Paid," "Answered," etc., can be included, the last-named items being altered at will by turning an indicator. In the case of a small factory, the machine is admirably suitable for stamping the time and date on workmen's time or costing cards, and on job costing cards or tags for the larger works. A special gauge is attached to the stamping platform, as shown in the illustration, to ensure that the time "in" and "out," or of commencing and finishing a job, are placed in the appropriate



"Blick-Universal" Recorder.

spaces on the card. Metal racks for holding cards can be provided, thus placing this simple and inexpensive device in line with more elaborate systems. All time-stamping would, however, have to be entrusted to one operator, if the attendance or costing records are to be regarded as at all reliable.

## Gledhill-Brook Time Recorder.

With the Gledhill-Brook Time Recorders, and similar systems, the simple functions hitherto described have been expanded in many directions, until a wonderful degree of flexibility in both time-stamping, and in the arrangement of the record receiving that stamping, has been achieved.

The method of setting up the equipment, consisting of the Recorder itself, and two racks for holding the time cards in numerical order, is shown on page 361. Assuming that the employee enters from the left, he takes his card from the numbered slot of the first (or "In") rack, inserts it into a sheath near the bottom of the Recorder, impresses the time by pulling a lever, and then deposits it against his number in the second (or "Out") rack. When every employee has registered his attendance, or a certain time limit has been reached, the racks can be folded together and locked. The procedure is reversed on leaving, the card being stamped and transferred to its original position for the next entry. So far, the operation is simple enough and presents no outstanding feature worthy of comment. The

clockwork mechanism is well made, easily accessible (the printing apparatus can be withdrawn separately), and cleaning can be carried out locally without calling in the aid of the makers.

Passing from these primary details, we shall find that the range of adaptability is so great that any reasonable demand can be met by the appliance. The various possibilities will perhaps be grasped more clearly, and the selection of a suitable model facilitated, by following the practice, as before, of grouping the essential particulars.

The Time or Job Card—

1. The information on the card can be arranged in any order desired.

2. The cards have to be of a standard size, but sufficient latitude is allowed to meet general requirements.

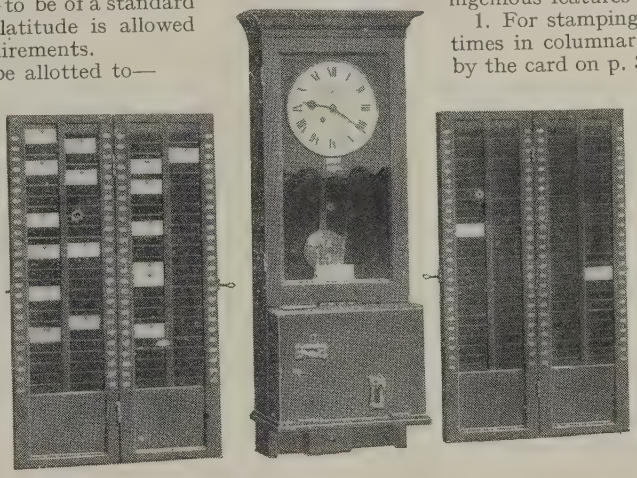
3. One card can be allotted to—

(*a*) Each man showing the time engaged on each operation during the week.

(*b*) Each job, showing the several operations, and the time occupied by the respective individuals.

(*c*) Each separate operation.

(*d*) Each machine, showing output and the number of hours the machine has been running. A further card could be used for recording idle time, indicating the reason for each stoppage.



Gledhill-Brook Equipment.

4. The same Recorder can be used for each of the cards included under (3), irrespective of the different forms of ruling.

The Time Impression—

1. The time printing ranges from a simple record of the hour and minute to a complete statement of the hour, minute, day of week, and the date, thus: **11**.30 M 6 NO (that is, 11.30 a.m. on Monday the 6th November).

2. "A.M." or "P.M." time is indicated by printing the day letter in an upright or horizontal position respectively. Thus: **7**.55 M represents 7.55 on Monday morning, while **5**.30 W represents 5.30 on the afternoon of the same day (*see* the "out" column of the specimen time card on the next page, where the impressions are shown in facsimile

3. By using a two-colour ribbon (similar to the black and red ribbon of a typewriter), which is automatically shifted by the clock from one colour to the other according to the normal working hours in force, the time for employees arriving late or leaving early can be printed in red. These impressions are still further emphasized by throwing the letter indicating the day to one side of the vertical grouping of all other entries, as shown below (the italics representing the printing in red)—

*7.33* *W*
**12**.58 W
**5**.33 W

Position on Card of Time Impression—

The various methods of recording and spacing the entries on the cards represent one of the most ingenious features of the system—

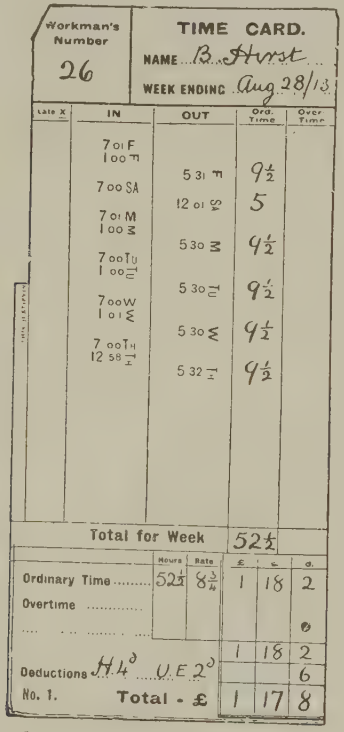
1. For stamping "in" and "out" times in columnar form, as illustrated by the card on p. 362, the sheath into which the card is dropped is moved to one of these two positions by a "shift lever" before the printing lever is depressed. Similarly, in the case of a single pair of entries required on a work label, the starting and finishing times can, by manipulating these two levers, be recorded on the special spaces provided.

2. The mechanism just described relates solely to the horizontal spacing. As regards vertical spacing, i.e. the insertion of the times down the length of the columns, the machine actuates a "clipper," which cuts away a small portion of the card at one edge every time it is dropped into the sheath for printing; the card consequently drops a little lower each time it is used, and the entries are spaced automatically without any attention or adjustment by the workman. The clipped edge can be seen on reference to the illustration, the impressions being equi-distant from one another down the card, whether required in the "in" or "out" column.

With a simpler type of machine, the bottom of the sheath on which the card rests is moved a distance equal to one space at the end of every twelve hours.

3. In the latest model, the "shift" lever for horizontal spacing has been dispensed with altogether, the container for the card being moved

automatically, and every twenty-four hours, from one position to the other by the clock. The entries, therefore, for each day appear together,



Workman's Number 26

TIME CARD.

NAME B. Hurst

WEEK ENDING Aug 28/13

| Late X | IN | OUT | Ord. Time | Over Time |
|---|---|---|---|---|
| | 7 01 F<br>1 00 F | | | |
| | | 5 31 F | 9½ | |
| | 7 00 SA | | | |
| | | 12 01 S | 5 | |
| | 7 01 M<br>1 00 M | | | |
| | | 5 30 M | 9½ | |
| | 7 00 TU<br>1 00 TU | | | |
| | | 5 30 TU | 9½ | |
| | 7 00 W<br>1 01 W | | | |
| | | 5 30 W | 9½ | |
| | 7 00 TH<br>12 58 TH | | | |
| | | 5 32 TH | 9½ | |
| | | Total for Week | 52½ | |

| | Hours | Rate | £ | s. | d. |
|---|---|---|---|---|---|
| Ordinary Time | 52½ | 8 3/4 | 1 | 18 | 2 |
| Overtime | | | | | |
| | | | 1 | 18 | 2 |
| Deductions H4 U.E.2 | | | | | 6 |
| No. 1. Total - £ | | | 1 | 17 | 8 |

and in alternate columns, down the card. All the employee has to do is to drop his card into the slot, and pull the printing lever. In the event of his absence for a day, attention is at once called to the fact by the blank space on the card.

From the foregoing description it will be realized that a suitable combination of the different functions can be arranged to fit in with almost any costing system, where the element of time is a vital factor. The use of cards is also of material assistance, since the front of the card constitutes the weekly wages record for the workman, while the reverse can be used for summarizing the allocation of costs under different jobs, the details of which would be carried in from still further cards bearing time impressions.

## Advantage of Time-Recording Systems.

While not desiring to weary the reader with self-evident truths, the following advantages of a time-recording system are perhaps worth bearing in mind—

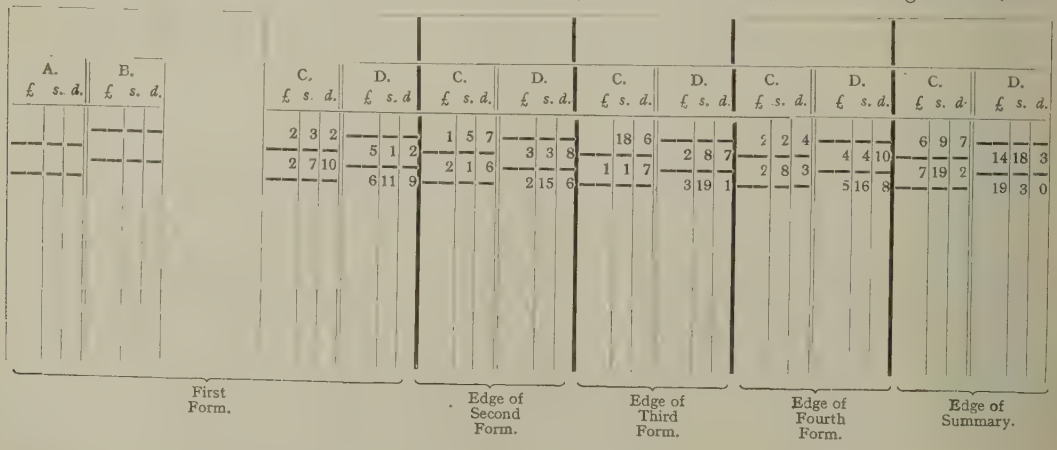
1. The staff are more likely to be punctual.
2. The accuracy of the time record is assured.
3. The records are prepared by the workmen themselves, and the clerical staff can therefore be reduced.
4. The cards form the basic record, and carry the usual conveniences of a card system as regards grouping, distribution, filing, or colour schemes.
5. A glance at the card racks will at once show absentees, jobs finished or in progress, etc.

Although the Recorder can be relied on absolutely as regards the time of attendance, or periods of occupation, it cannot be made responsible for the individual, and its position should be such that enables suitable observation or supervision to be maintained.

## CHAPTER IX

## SYSTEMS OF RECORD

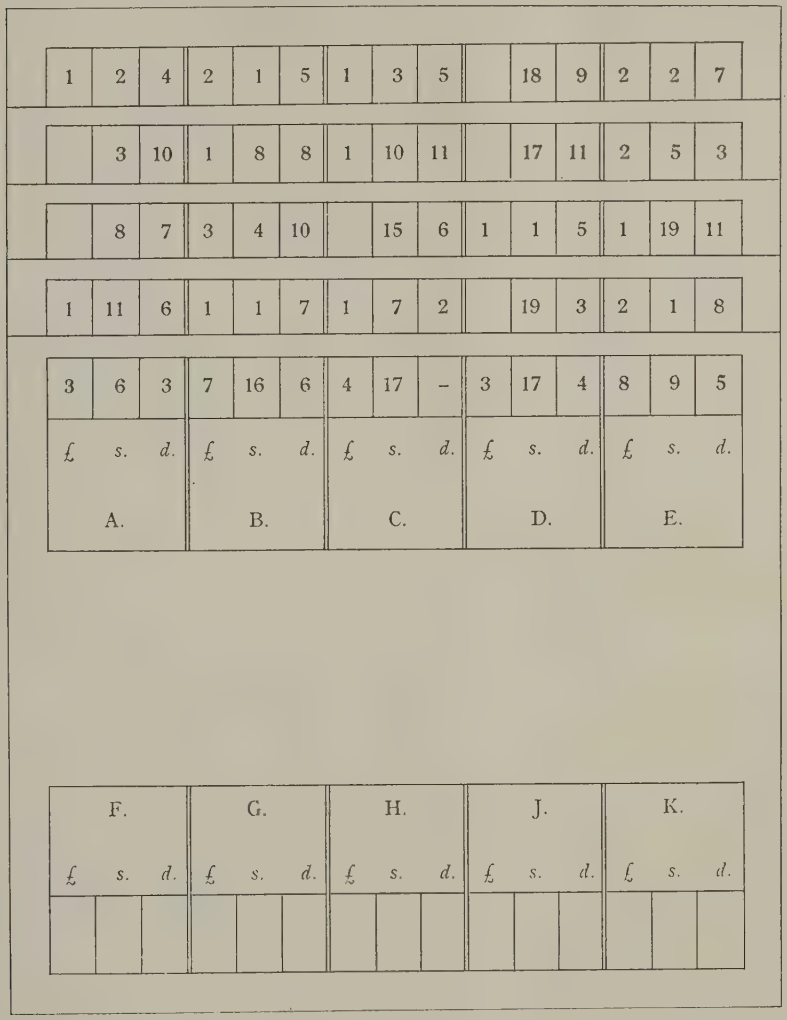
CONSIDERATION has been given, hitherto, to various mechanical appliances which expedite the *preparation* of records, but a saving of time, or a



reduction of processes, can often be effected by studying the design of the medium which is going to bear the record.

## The Construction of Forms.

Standard sizes for paper, cards, etc., should always be adhered to; storage receptacles are then interchangeable, and can be transferred from one section of the office to another when a particular record ceases to be necessary. In the case of sheets of paper, nothing is more troublesome than making up a bundle of forms of different sizes for storage purposes, and rapid reference is almost impossible. With this same question of reference in view, it should be remembered that the most convenient position for a number, or code letter, is the top right-hand corner of the paper, and, even then, not too near the corner, or the finger, when turning over the forms, may partly obscure this information. When two or more items of this description have to be included they should be grouped together in the position indicated; the eye does not then have to turn aside for any of the subsidiary details. If the form has to be typewritten, lines should be omitted as a matter of course, and the details should not be scattered indiscriminately over the form, but grouped throughout in horizontal order; full advantage can then be taken of the automatic movement of the carriage from right to left, and



the regular upward travel of the paper at the end of the line. A steady and rapid flow of work is also gained by arranging the particulars on the form, so far as is possible, in exactly the same order as they appear on the "copy," thus obviating the necessity of searching for the successive items. Where an amount, shown only in figures on the original, has to be copied in both words and figures, the form should be designed so that, *while the amount is in the mind of the typist*, the dual designations can be written successively along the same line, thus—

| ——————————the sum of | £ | s. | d. |
|---|---|---|---|
| Two pounds seven shillings and four pence | 2 | 7 | 4 |

The tabulation of figures for purposes of comparison, or for arriving at totals, usually absorbs an appreciable amount of time. If the main interest with a series of statements lies in the totals only, the work of posting can be avoided altogether by printing the form so that the vertical columns of figures are placed at the edges of the paper. The figures can then be aggregated by laying the forms alternatively, from either edge, in overlapping order, and making cross totals.

| Name. | Wages. | | | Insurance Deductions. | | |
|---|---|---|---|---|---|---|
| | Overtime. | | | Health. | | |
| | | | | Unemployment. | | |
| | £ | s. | d. | £ | s. | d. |
| A | 4 | 2 | 7 | | | 5 |
| | 1 | 5 | – | | | 9 |
| B | 3 | 17 | 6 | | | 5 |
| | 1 | 3 | 4 | | | 9 |
| C | 2 | 15 | 8 | | | 4 |
| | | 16 | 8 | | | 7 |
| D | 3 | 1 | – | | | 4 |
| | | 15 | 6 | | | 7 |
| Totals | 13 | 16 | 9 | | 1 | 6 |
| | 4 | – | 6 | | 2 | 8 |

Pay Roll

The method of operation will perhaps be understood more clearly by referring to the grouping of forms illustrated on page 362, where totals from four columns are carried direct to a summary, without any preliminary duplication of the figures appearing on each form.

As objection is sometimes taken to "cross-casting," the form could be designed on the lines shown on page 363, where it will be seen that foot totals can be obtained, in the ordinary way, by a vertical and overlapping arrangement of the forms. The appearance of the first five titles or items, A, B, C, etc., *below* the figures, is perhaps unusual, but is necessary in order to force the figures as near the edge of the paper as possible, and is of minor importance in view of the advantage which is gained.

Certain classes of tabulated records (e.g. pay rolls) are liable to a constant horizontal expansion, a fresh column being necessary whenever some new item is introduced. This expansion can be checked by utilizing each column for two items, the space in which the second amount is entered being marked by some form of light "half-tone" printing, similar to the background of a warrant or other instrument of payment. The vertical totalling of the two sets of figures in each column can then be performed with ease, as shown by the specimen ruling for part of a pay-roll given opposite.

The same principle is just as effective for assisting the operation of sorting documents by number, a sub-division of the number on each form arranged thus—

| 28 | 74 |
|---|---|

enabling the eye to select the 'units' and 'tens', or 'hundreds' and 'thousands' positions with great rapidity.

From the few examples which have been given, it will be seen that the question of design in forms, as a potential source of labour-saving, is a matter which deserves the closest attention and study.

## Indexing with Cards.

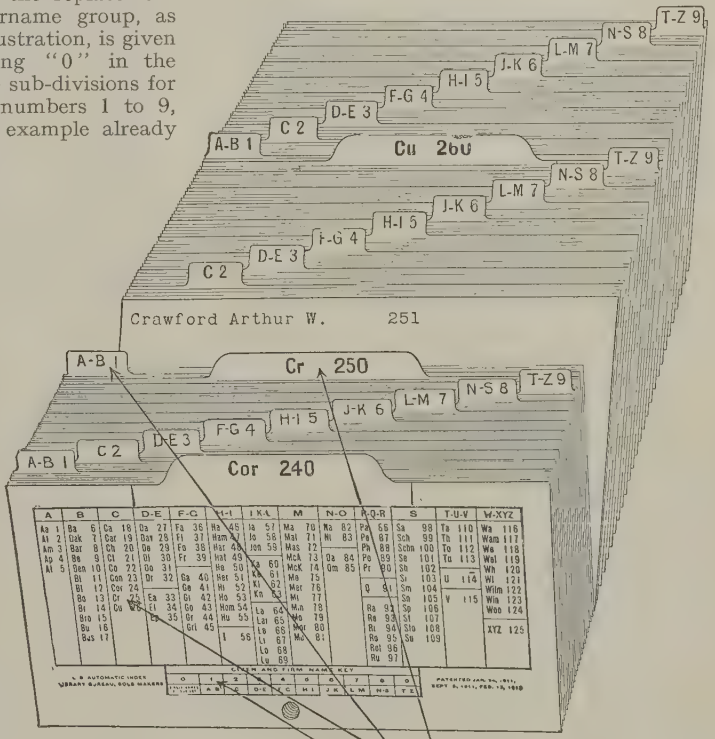
The advantages of the card system, in its ordinary form of loose cards filed in a drawer, is familiar to every business man, but scientific methods of "tabbing" these cards are not so well known. The first advance over the ordinary guide card was the detachable steel tab or "signal," which can be varied in colour and transferred from card to card as required. Thus, the one set of cards filed in alphabetical or numerical order can also be grouped permanently under district, class of goods, etc., by attaching a "signal" in a constant position on each card for the respective headings required; or fluctuating factors, such as calls by travellers, dates for "reminders," etc., can be kept under observation, and the "signal" removed when it has served its purpose.

Returning to the normal type of guide card, the method of indexing name-headings adopted in the

Library Bureau system is practically automatic in action. It will be observed that two separate series of tabs are used. The central or primary tabs (coloured blue) indicate the sub-divisions under surname, while the smaller or secondary tabs (buff in colour), which are identical for each group of surnames, mark the divisions for the Christian name, or additional surname (or *given* name, as it is called in the illustration). To find the card for *Arthur W. Crawford*, we first select by sight the surname tab *Cr*, and then turn over the few cards behind the *A–B* tab for Christian names, until the card required is discovered. Similarly, the card for *Cromwell & King* would be located behind the *J–K* tab within the same sub-division of surnames. As the secondary tabs occupy the same positions throughout, the process of passing from the surname to the Christian name tab becomes almost mechanical after a little experience. Another feature of this index is a numerical system, to facilitate the replacement of cards withdrawn. Each surname group, as shown by the first card in the illustration, is given a consecutive number (omitting "0" in the anits' position throughout); the sub-divisions for uhristian names also bear the numbers 1 to 9, Cccording to position. In the example already taken, the card bearing the name *Arthur W. Crawford* falls within the *Cr* surname group numbered 250, while the *A–B* sub-division for Christian names is numbered 1. All cards included between these limits are therefore numbered 251, and the eye is at once attracted to the disparity between the numbers, if any attempt is made to file the card away outside its proper group.

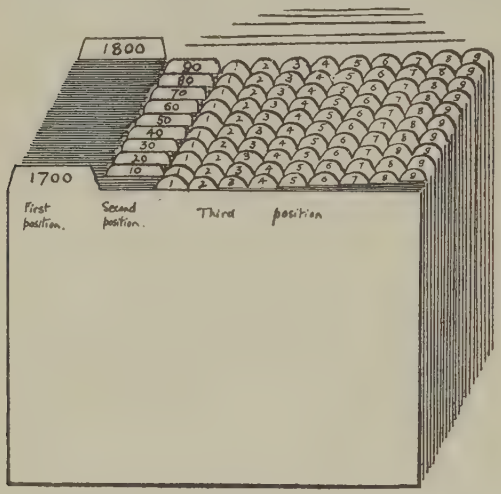
Another method of arranging tabs for a numerical index, or card ledger, enables the operator to go directly, in one motion, to each card without any preliminary inspection of adjacent cards. This is effected by means of a system of tabs designed as on page 366, those in the first and second positions representing separate guide cards, while those in the third position are carried by the record card itself. To obtain card No. 1,745, the eye would pass first over the tabs "1,700" and "40," and then come to rest on the unit or third position tab "5," the hand in the meantime advancing to remove the card from the file.

The use of an ordinary card index for recording such brief information as names and addresses, items of stock, prices, etc., is regarded to-day, in the light of modern improvements, as a slow and cumbersome process. Instead of full-sized cards, narrow strips of board, or even stout paper, sufficiently wide to carry a typewritten name and address, are slipped into a metal frame (*see* p. 366) and maintained continuously in alphabetical or numerical order as with any other form of unit index; the "Bizada" is a well-known index of this type. The typing of the slips is quite a simple matter, because they are made up for this purpose in "belts," i.e. they are similar in appearance to the roller blind used for a shop-front, and the individual "slats" or strips are separated when the full belt has been typed, the method of inserting each strip in the frame being shown on p. 366. The strip index is really a return to the page of the book, with the object of visualizing a

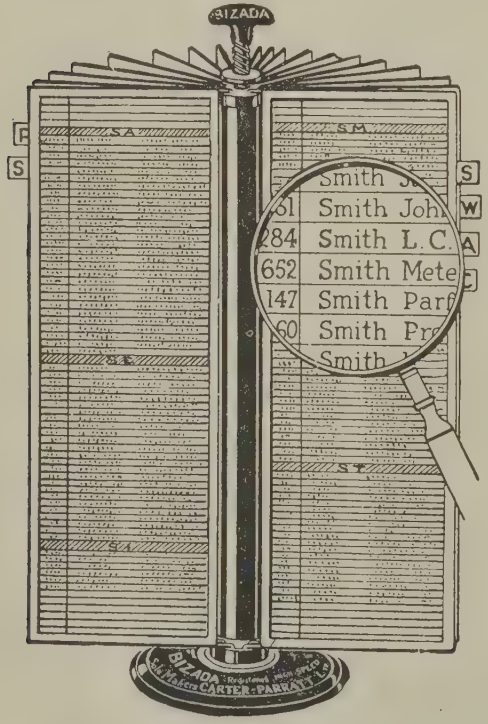



AUTOMATIC INDEX FOR CARD FILES

large number of names at one time; but its enormous advantage over the book is that the



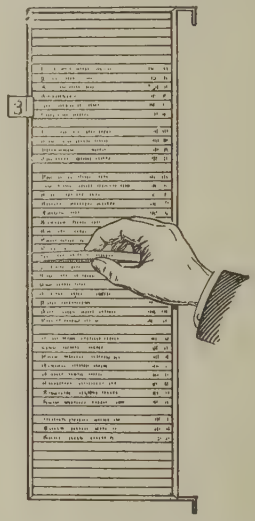

index will be up to date, in correct order (misfiling can be detected at once), and can be classified, if desired, by using strips of different colours.




"Bizada" Strip Index

Further, the frames are usually tabbed and "swung" on hinges to a central revolving pillar (similar to the revolving stand for displaying picture post cards), and reference can be made with the left hand while the right is engaged in taking notes.

If the strip of card is inadequate for recording the particulars, the principle of "high visibility" can be retained by substituting a full-sized card,

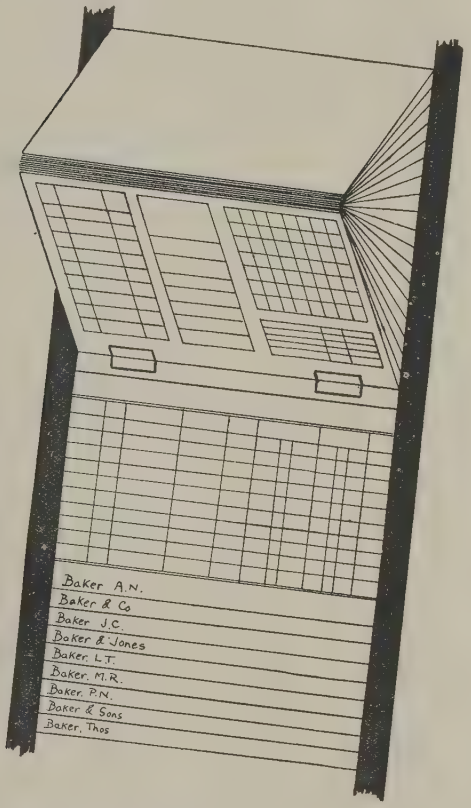


of the usual standard dimensions, which is suspended from the strip on hinges. The name or number is typed along the *bottom* edge of each card, and as the cards fall automatically into overlapping order, the facility of reference equals that of the strip-index. The general principle of this index will be seen from the illustration on p. 367, which shows a section of a card frame; as regards the make-up of a set of frames, they can be arranged in the form of shallow drawers, a desk slope (like the leaves of a book), a series of swinging wall panels, or can be attached to a revolving pillar, as with the strip index. In addition to the usual advantages of a card index, combined with quick visibility in selection and reference, further particulars can be written on the back or front of the card without removing it from the frame. Although varying slightly in constructional detail, the Bizada, Acme, Kardex, and Costmeter Visible Postindex systems are all worked on this common principle. In the Kardex system, the hinged card carries a transparent celluloid pocket along its bottom edge, into which subsidiary cards and coloured "signals" can be slipped. With the Costmeter Visible Postindex the capacity of the writing surface is increased by doubling a form in half, and suspending it along the fold on a metal rod; a specific form can be earmarked (or "offset") by moving it along the rod out of

alignment with the others, a slight margin for this purpose being allowed in the width of the frame.

## Loose-Leaf Books.

There is one school of thought which, although desiring the facilities of the card or unit system, is reluctant, so far as accounting records are




concerned, to depart from the safeguards afforded by the bound book. To meet this demand, the loose-leaf system has been devised, which not only satisfies the conditions laid down above, but, from the point of view of continuity of record, where the use of cards might be dangerous, has certain points of superiority, viz.—

1. Large accounts are kept together, and balances do not have to be traced from one part of the book to another.

2. A loose-leaf ledger is perpetual, i.e. it is unnecessary to open new ledgers at the end of each accounting period.

3. Closed accounts can be removed from the binder, and no more leaves have to be used than are absolutely necessary. Unused pages always represent a considerable percentage of wasted space in the ordinary bound book.

4. Conversely, new accounts can be added, as required, in correct alphabetical or numerical sequence, and the book is therefore self-indexing. Expansion can be provided for easily by increasing the number of binders.

5. Different rulings can be used in the same book.

6. The pages can be typed in conjunction with an invoice duplicating, or machine-posting, system.

If each page bears a printed consecutive number, and extra pages added later are recorded in a separate register, the tearing out of any page would be discovered at once by the auditor, quite apart from the fact that the "stub" would still be left in the locked binder. On page 368 are shown the three methods, in general use, of attaching the sheets to the binder or cover. In the case of (*a*) the edge of the leaf is threaded, by means of punched holes, on to metal posts, but the insertion of a new leaf necessitates the preliminary removal of all leaves which precede it, unless twin posts operating in parallel from the two covers are in use ; with (*b*) the metal posts are again used, but the leaf can be placed in its correct position without removing any of the others. Both types of binding can be obtained from any commercial stationer. With (*c*) each leaf is passed immediately on to a flexible band or thong, and is gripped, as between the jaws of a vice, by winding the edges of the covers together. The thong gives a more pliable hinge, and ensures a flat writing surface over the whole of each page, a well-known loose-leaf book of this type being the "Kalamazoo." Whatever system is used, the margin indicated in the illustrations by a dotted line is firmly held in place by the binding mechanism, and any tearing out of pages would be betrayed by the strip of paper left behind.

## The Filing of Correspondence or Papers.

No other section of office organization has evoked so wide a range of opinion as the question of the most suitable means for storing letters and papers. This is only to be expected in view of the varying conditions in different classes of business, but there are certain common factors which are worth consideration, viz.—

1. A centralized filing section should serve the whole of the business.

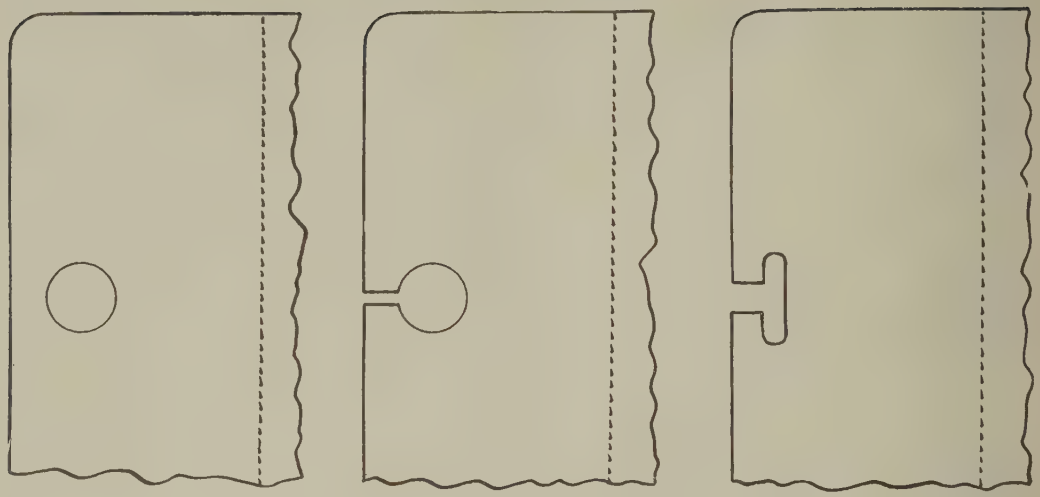
2. The file unit should contain everything relating to the same subject or customer.

3. The filing should be definitely assigned to a particular person or persons, and the work inspected at intervals.

4. The movement of the file units or folders should be scrupulously recorded, and the staff reminded of any undue retention of papers.

5. All out-of-date matter should be cleared from the folders at certain fixed periods.

The efficiency of the system is regulated far more by these factors than any question of what form of container should be used for the papers,



(*a*) (*b*) (*c*)

but the vertical filing of folders is probably the most effective method. Even so, care should be taken to avoid any undue elaboration of guide cards, and other subsidiary aids. It should be remembered that the eye cannot absorb the contents of more than one filing drawer at a time, and as the capacity of each drawer is limited, a stout manilla folder for each set of papers, with a metal-protected tab carrying the name, is all that is really necessary. Failure in replacing a folder in the file with mathematical accuracy as regards position is not a very serious matter, since all the names are visible, while the "direct name" system which is advocated is exceedingly simple to operate.

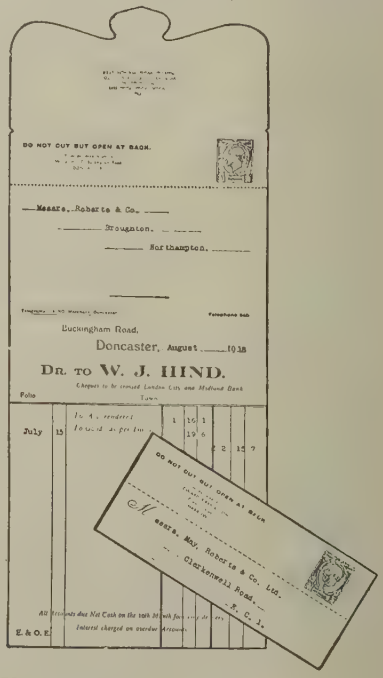
CHAPTER X

## PREPARING FOR THE POST

THE despatch of the mail is perhaps more in the nature of a factory than an office process, which probably accounts for the distinct and separate class of machinery which has been designed to assist in the various stages of the operation. The peak of the load with outgoing postal matter is usually reached towards the end of the day, and although the final operations are simple enough in themselves, it often happens that staff has to be withdrawn from more important duties to ensure the despatch of some urgent circular, or other communication, in time to catch a particular mail. Rush work of this description can be reduced, if not entirely eliminated, by installing the inexpensive yet thoroughly practical appliances to be described. A few preliminary remarks will first, however, be made on envelopes and folders.

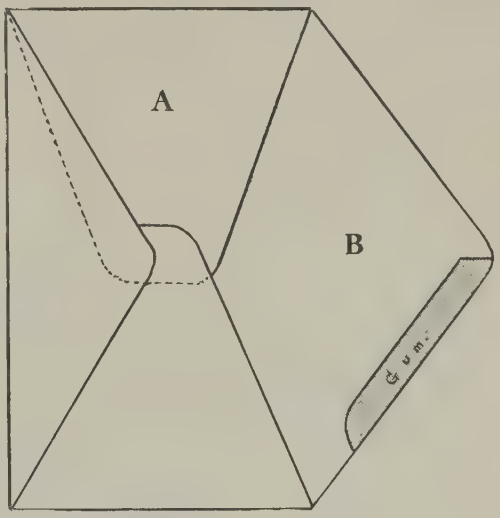
### Envelopes and Folders.

Just as the document or form contains potential labour-saving elements, so the medium for carrying it through the post is worthy of attention in this respect. Although the "cut-out" or "window" envelope saves the process of addressing, it is not




VICASH STATEMENT AND FOLDER

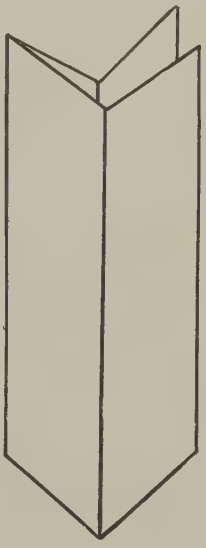
used to the extent that one would have supposed ; a transparent covering across the opening should be avoided, if possible, because the address is liable to become indistinct if this covering is not in close contact with the surface of the enclosure. The paper bearing the name and address, be it letter, memorandum, or statement, should conform to a standard pattern, so that the particulars for postal purposes will fall into register with the opening on one size of envelope. To ensure the return of undeliverable correspondence, the name and address of the firm should always appear on the envelope, together with an indication, in the case of printed matter, that the extra postage will be paid ; an accurate and " live " mailing list is a sure preventative of wastage, particularly with advertising material. Sometimes the use of an envelope can be avoided altogether, a case in point being the " Vicash " combined statement and folder, as shown on page 368, where the heading on the statement, and the address for postal purposes, are identical. The folder certainly saves the envelope, but the preparation of folders for post should be carefully watched as a labour cost, because the use of envelopes may, in the long run, prove to be cheaper. In this connection, it should be noted that there has been introduced the special form of envelope for printed matter, shown opposite ; this is sealed in the ordinary way, yet still leaves one of the flaps open, and so entitles the package to a lower rate of postage. The wing *A* is not attached to the rest of the envelope along the edge marked by the dotted line, and consequently becomes the unsealed flap when *B* has been fastened down. A further consideration is that the gummed flap of a folder cannot be fastened down with a




sealing machine, whereas no such difficulty is present with an envelope of this pattern.

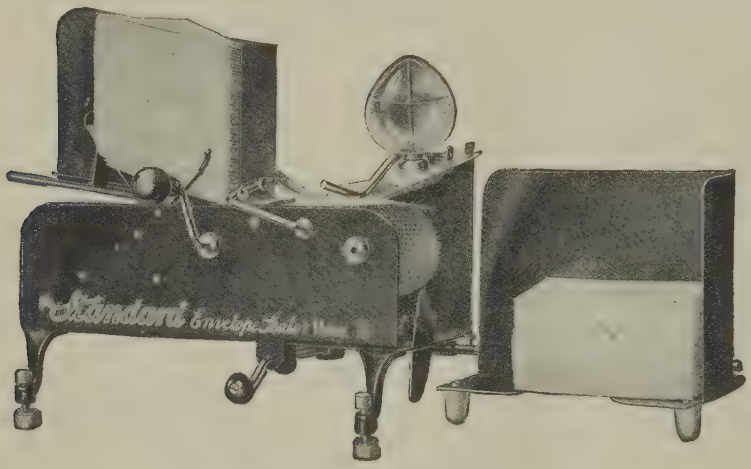
## Folding Machines.

An enclosure has to be folded before it can be inserted in the envelope, and where this work has to be carried out on any extensive scale the



| | Fold | Single. | Legal. | Double Parallel. |
|---|---|---|---|---|
| Size of Paper | Max. | $6\frac{1}{8} \times 7$ in. reduced to $6\frac{1}{2} \times 3\frac{1}{2}$ in. | $6\frac{1}{2} \times 10\frac{1}{2}$ in. reduced to $6\frac{1}{2} \times 3\frac{1}{2}$ in. | $6\frac{1}{2} \times 13$ in. reduced to $6\frac{1}{2} \times 3\frac{1}{2}$ in. |
| | Min. | $2\frac{1}{2} \times 4$ in. reduced to $2\frac{1}{2} \times 2$ in. | $2\frac{1}{2} \times 4\frac{1}{2}$ in. reduced to $2\frac{1}{2} \times 1\frac{1}{2}$ in. | $2\frac{1}{2} \times 5$ in. reduced to $2\frac{1}{2} \times 1\frac{1}{4}$ in. |

Gammeter Multigraph Folder, Junior, will be found to assist the operation materially. The range of folds is illustrated on p. 369, the maximum and minimum size for the sheets of paper being shown in each case. The forms or statements are simply laid in packets on the feeding ledge of the machine and, by turning a handle, are folded at the rate of approximately 6,000 forms per hour. The motor-driven Aldrich Folder is a very effective machine when this class of work has to be handled in any bulk.




Standard Envelope Sealer

## Standard Envelope Sealer.

The sealing of batches of envelopes by hand is not only a lengthy and troublesome process, but also requires some judgment as regards the amount of moisture applied, any excess of water in the brush causing blocks of envelopes to adhere together. With the Standard Envelope Sealer the exact amount of moisture required is conveyed by a small metal roller running in a bath of water, the envelopes being stacked on an inclined hopper, as shown, and carried forward automatically, by an endless rubber band, across this roller for sealing purposes. The flaps are raised and dampened in turn by the machine, and the envelopes deposited in the second hopper on the right, the weight of succeeding envelopes supplying the necessary pressure for completing the sealing. The claim of the makers that the envelopes can be dealt with at the rate of 200 per minute is by no means exaggerated; the machine can moreover be adjusted to take any reasonable size of envelope, but one size must be handled at a time.

## Stamping Machines.

The sticking of stamps on envelopes is no less messy than sealing the flaps of the envelopes, but here again machines for this work are available. Rolls of stamps of various denominations are obtainable from the Post Office, and can be locked in the appliance, the number used being counted and recorded on an indicator. Stamps could be affixed rapidly to forms of receipt as well as postal matter while, with another model, Health Insurance stamps can be attached to insurance cards, and *cancelled* in the same operation.

For large concerns, where the outgoing mail is of considerable volume, the Pitney Bowes Postage Meter Machine would perhaps serve the purpose better. The anticipated number of stampings for the unit value required (½d., 1d., 1½d., or 2d.) is "bought" from the Post Office, where a meter which controls the stamping mechanism is set accordingly, and a locking device adjusted so that the total value of the purchase cannot be exceeded. The meter is then connected with the stamping appliance held by the firm, and a special form of impression placed on each of the envelopes.

CHAPTER XI

# INTERCOMMUNICATING TELEPHONES

The use of the telephone as an internal means of verbal transmission needs no introduction so far as general principles are concerned. It should be recognized that the lack of some instant method of communication between one section of the office and another causes an enormous waste of time; even when a series of internal extensions, connected with the Post Office system, has been installed, the provision of a supplementary service of "house" telephones is still worth consideration, because enquiries relating to two or more departments can be answered without losing, or causing delay to, the outside caller. The advantages of a private set of telephones may be readily accepted, but the particular system to be installed is quite another matter, and the type of service required must be very carefully studied before coming to a final decision. To assist the prospective user, the salient features of the principal systems will be briefly summarized.

Inter-communicating telephones may be divided into two groups—

1. The direct linking of any one station with all other stations.

This method is suitable when the number of stations is small, and is not likely to be increased, because the addition of a new instrument at any point necessitates the carrying of fresh wires between *each* of the stations.

2. The use of a central and automatic switch.

With this system the addition of new stations can keep pace, without difficulty, with the rapid growth of a business, since a direct connection between each further instrument and the switch is all that is necessary; this method of wiring is also preferable where the lines have to be conducted over a considerable distance from one building to another.

## "New System" Telephones.

The principles of operation contained in the first group have been employed for many years, but many improvements have been embodied in the modern instrument. The following features of the NEW SYSTEM, where the usual form of telephone instrument is used, give some idea of present-day facilities—

(*a*) Each instrument is equipped with a set of buttons representing the full range of stations, and communication is established by depressing the appropriate button.

(*b*) Two or more stations can be called at one time, thus enabling the manager to speak to several persons simultaneously.

(*c*) Connection can be limited to a single pair of stations, and the conversation kept secret from all other stations. The caller is also shown on an indicator at the receiving station.

(*d*) If the person required is not in his room, a "round call" key can be depressed in accordance with an agreed signal. This signal is given out at every station, and the individual indicated by the particular signal has only to depress the round call button on the nearest instrument to at once place himself in communication with the calling station.

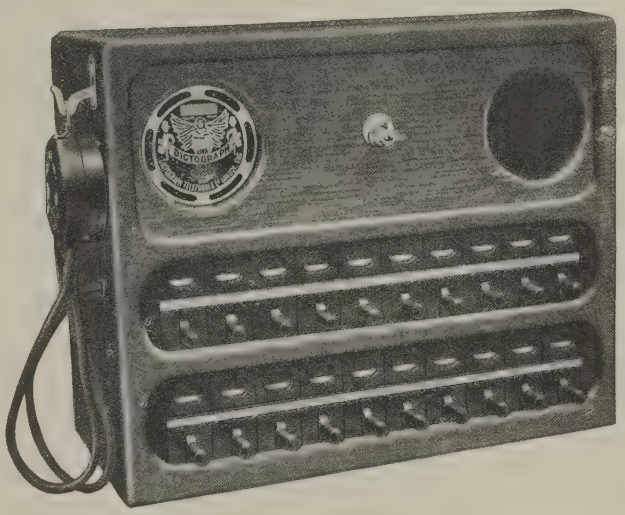
## The Dictograph.

These alternative means of connection are practically repeated with the DICTOGRAPH, but the form of apparatus used is quite distinctive. In place of the usual earpiece and transmitter, conversation is directed in ordinary tones, and from any part of the room, towards the box-like structure illustrated on this page. The disc on the left is an extra-sensitive transmitter, while the circular aperture on the right, like one form of "broadcasting" apparatus, is a loud-speaking telephone; for conversations of a confidential nature the earpiece shown on the left of the instrument can, however, be substituted. Some special features peculiar to this system are—

(*a*) Both hands are left free, and reference can be made more easily to papers (either on the desk or in some other part of the room) when speaking to another person, or dictating to the typist.

(*b*) By calling up several persons simultaneously, each can hear what the others are saying; in effect, a conference is then taking place.

(*c*) The head of the concern is provided with a "master-station" by which he can cut out instantly all other calls; he is never, therefore, confronted with an "engaged" signal.



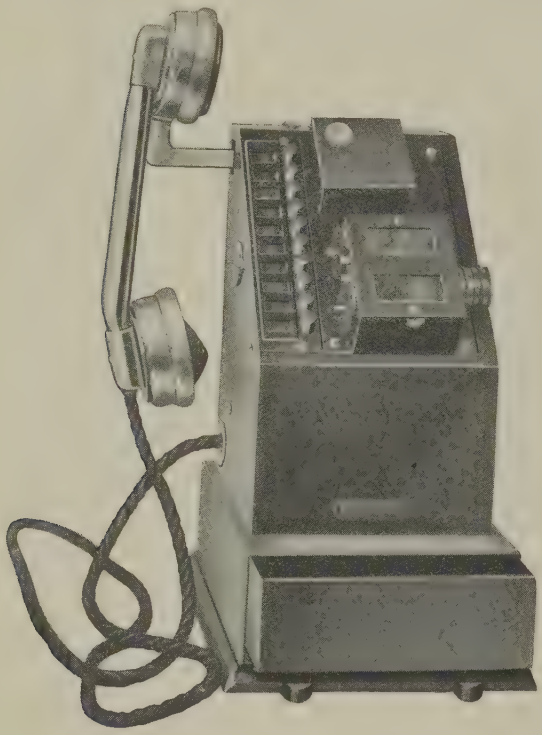

THE DICTOGRAPH MASTER STATION

## Relay Automatic System.

With the second group of internal telephones, where the lines radiate from a central switch, the normal type of instrument is used, a small revolving and numbered dial being added for the purpose of establishing automatic communication. The number required is obtained by moving the dial round to a "stop" for the respective digits, a spring connected with the dial restoring it, after each movement, to its normal position. The call is effected instantly on completion of this operation, and the usual telephonic procedure is followed from this point. The RELAY AUTOMATIC SYSTEM is worked on these lines, and as the switch is operated entirely on an electrical basis, the cost of maintenance is lower than with a semi-mechanical, semi-electrical, system.

## Electric Credit System.

For the large departmental store, the National Cash Register Co. have evolved a very ingenious telephonic system for sanctioning credit. Each department is equipped with the special form of instrument shown below, which is connected with a central point where the customer's record is maintained. The sales-slip is inserted in a slot provided on the slope of the telephone stand, and the electrical connection is not complete until this



Electric Credit System

slip is properly in position. The particulars are then passed over the telephone to the records department, and the clerk there, if the transaction is in order, depresses a stamping button, which causes the sales-slip in the distant department to be perforated with a special design ; this acts as the salesman's authority for accepting the charge. Where the range of credit customers is large, a series of selective buttons is provided for each telephone, so that a direct connection can be made with the clerk responsible for the particular group (alphabetical or otherwise) concerned.

The object of this Electric Credit System is similar to the other methods of telephonic communication, i.e. to avoid the employment of a large body of messengers, or the performance of such duties by a more highly-paid staff of salesmen and executives.

CHAPTER XII

# SUPPLIERS OF OFFICE EQUIPMENT

The makers or agents for the particular appliances described in the foregoing chapters are given in the accompanying list, the grouping following the order of the text. It should, at the same time, be clearly understood that many of these appliances have been selected solely as typical of their class, and a more extensive list can be obtained, in London, by referring to "The Buff Book" (the classified commercial directory supplied to each telephone subscriber), the appropriate headings being—

Adding Machines, Dealers and Hirers.
Addressing Machine Manufacturers.
Book-keeping Machines.
Business Advisers.
Calculating Machines.
Card Index Systems and Supplies.
Cash Registers.
Copying Appliance Makers.
Dictating Machine Manufacturers.
Duplicating Machines and Accessories.
Envelope Makers.
Filing Cabinets and Systems.
Invoicing Machines.
Letter Copying Machines.
Letter Filing Systems and Manufacturers.
Loose-leaf Ledger and Book Specialists.
Numbering Machine Makers.
Office Appliances and Equipment.
Perforating Machine Manufacturers.
Pneumatic Despatch Tubes.
Stamping Machine Makers.
Stencil Cutting Machines.
Telephones, Contractors and Engineers.
Time Recorders.
Type Printing Machines.
Typewriters.

**ADDING MACHINES (page 344)—**

*Burroughs :* Burroughs Adding Machine Co., Ltd., 76 Cannon Street, London, E.C.4.

*Sundstrand :* Blick Calculators, 9 and 10 Cheapside, London, E.C.2.

*Dalton :* The Merkham Trading Co., Ltd., 329 High Holborn, London, W.C.1.

*Comptometer :* Herbert E. Robbins, Ltd., Imperial House, Kingsway, London, W.C.2.

*Adding and Subtracting Typewriters :* Most of the well-known makes of typewriters.

**BOOK-KEEPING AND ACCOUNTING MACHINES (page 347)—**

*Burroughs : See under* Adding Machines.

*Remington-Wahl :* Remington Typewriter Co., Ltd., 100 Gracechurch Street, London, E.C.3.

*Elliott-Fisher :* Elliott-Fisher Co., 10 Queen Street, London, E.C.4.

*Hollerith :* The British Tabulating Machine Co., Ltd., 2 Norfolk Street, Strand, London, W.C.2.
*Powers :* The Accounting and Tabulating Corporation of Great Britain, Ltd., 57-58 Chancery Lane, London, W.C.2.

**CALCULATING DEVICES** (page 349)—

READY RECKONERS : Gall & Inglis, 31 Henrietta Street, London, W.C.2. (Cotsworth's) John Gibson, 53 Coleman Street, London, E.C.2.

CALCULATING MACHINES —

*Burroughs*, *Comptometer* } *See under* ADDING MACHINES.

*Madas*, *Rema Portable*, *Millionaire* } Gilbert Wood, 75B Queen Victoria Street, London, E.C.4.

*Arithmometer :* C. & E. Layton, 56 Farringdon Street, London, E.C.4.
*Tim :* George Spicer, Market Place, Brentford.
*Brunsviga :* J. Miller, 48 Clerkenwell Green, London, E.C.1.
*Monroe :* The National Office Equipment Co., 61 Queen Victoria Street, London, E.C.4.

**APPLIANCES FOR COUNTER WORK** (page 351)—

*National Cash Register*, *N.C.R. Credit File* } The National Cash Register Co., Ltd., 225 Tottenham Court Road, London, W.1.

*Burroughs "Retail" Machine : See under* ADDING MACHINES.
*Brandt Automatic Cashier :* Brandt Automatic Cashier Co., Ltd., Washington House, 40-41 Conduit Street, London, W.1.

**DUPLICATING PROCESSES** (page 354)—

*Diagraph :* Diagraph Stencil Machine Co., Ltd., 82 Mark Lane, London, E.C.3.
*Clay Copier :* B. Podmore & Co., Southport, Lancs.
*Carbotyp :* Kenrick & Jefferson, Ltd., 22 St. Andrew Street, Holborn Circus, London, E.C.4.

STENCIL DUPLICATORS—
(*Flat*) Ellams Duplicator Co., Ltd., 12 King Street, London, E.C.2.
*Swiftograph :* The Swiftograph Duplicator Co., Ltd., Merivale Road, London, S.W.15.
*Multistamp :* Robert W. Wright Co., Ltd., 116 Southampton Row, London, W.C.1.
*Gestetner :* D. Gestetner, 37 Ludgate Hill, London, E.C.4.
*Roneo :* Roneo, Ltd., 5-11 Holborn, London, E.C.1.

TYPE-SETTING DUPLICATORS—
*Gammeter Multigraph :* The International Multigraph Co., Ltd., 15-16 Holborn Viaduct, London, E.C.1.
*Roneotype :* Roneo, Ltd. (*See* ABOVE.)

LABEL PRINTER—
*Printator :* Robert W. Wright Co., Ltd., 114-6 Southampton Row, W.C.1.

ADDRESSING MACHINES—
*Roneo.* (*See* ABOVE.)
*Elliott* (*Addressamite*) *:* The Hayward Co., 62 Red Lion Street, London, E.C.1.
*Addressall :* Addressall Machine Co., 97D Queen Victoria Street, London, E.C.4.
*Addressograph :* Addressograph, Ltd., Kingsley Works, Grange Road, London, N.W.10.

**PROTECTIVE DEVICES** (page 357)—

CANCELLING MACHINES : J. Sloper & Co., Ltd., 22 Budge Row, London, E.C.4. Jean O. Sauven, 195 Upper Thames Street, London, E.C.4.

CHEQUE WRITERS—
*Protectograph :* Halsby & Co., 6 St. Bride Street, London, E.C.4.
*Safe-Guard :* Lanston Monotype Corporation, Ltd., 43 and 43A Fetter Lane, London, E.C.4.

**TIME RECORDERS** (page 359)—

*Blick :* Blick Time Recorders, Ltd., 174 Gray's Inn Road, London, W.C.1.
*Gledhill-Brook :* Gledhill-Brook Time Recorders, Ltd., 26 Victoria Street, London, S.W.1.

**SYSTEMS OF RECORD** (page 362)—

INDEXING WITH CARDS—
*Library Bureau :* Library Bureau, Ltd., 2 Ludgate Hill, London, E.C.2.
*Bizada :* Carter Parratt, Ltd., 16 Victoria Street, London, S.W.1.
*Acme :* The Macey Co., Ltd., 65-66 Houndsditch, London, E.1.
*Kardex :* Kardex Visible Card Systems, 3 Holborn Viaduct, London, E.C.1.
*Costmeter Visible Postindex :* Boots Systems Department, 82-83 High Holborn, London, W.C.1.

LOOSE-LEAF BOOKS—
*Kalamazoo :* Morland & Impey, Ltd., 58 Queen Victoria Street, London, E.C.4.

**PREPARING FOR THE POST** (page 365)—

*Vicash Combini Statement Form :* Vick, Ashworth & Co., Ltd., 37 and 38 Strand, London, W.C.2.
*Folding Machines :* International Multigraph Co., Ltd., 15-16 Holborn Viaduct, London, E.C.1.
*The Aldrich Folder :* Addressall Machine Co., 97D Queen Victoria Street, London, E.C.4.
*Standard Sealing Machine :* Norman & Hill, Ltd., 54 Holborn Viaduct, London, E.C.1.
*Postage Meter Machine :* Postage Meters and Machines Co., 56 Kingsway, London, W.C.2.

**INTERCOMMUNICATING TELEPHONES** (page 370)—

*New System :* London Telephone (New System) Co., Ltd., Donnington House, Norfolk Street, London, W.C.2.
*Dictograph :* Dictograph Telephones, Ltd., Dictograph House, Denman Street, London, S.E.1.
*Relay Automatic System :* Relay Automatic Telephone Co., Ltd., Marconi House, Strand, London, W.C.2.
*Electric Credit System :* The National Cash Register Co., Ltd., 225 Tottenham Court Road, London, W.1.

SECTION 16

# Organization and Routine of Office and Warehouse

By W. Campbell, A.C.I.S.

## CHAPTER I

## THE SMALL MAN'S BUSINESS

The business of the "small man," like that of the big man, takes in a number of activities that are distinct. It is scarcely likely that the packer of his parcels will also be the keeper of his books. In a very small business these duties may be performed by the same person; but even then the writing up of accounts is something apart from the receiving and despatching of goods. That, again, is distinct from the serving of customers who call for what they want, or from the execution of orders that come in by post. Such duties, however, are all as much part of the small business as of the large one; so that the difference between large and small businesses is not a difference of the kind of work to be done in them. Rather is it that, in the big business, there is very much of each particular kind of work to do, and that a whole group of persons is employed on work of one kind only. The small man has one clerk who keeps all the books and cash, and writes all the letters of the business; or he has one porter who receives and unpacks all goods coming in, and packs and sends off all goods going out; or, perhaps, one salesman who serves all customers and gets up all orders. On the other hand, in the office of the big business there are many clerks, each doing his or her own share of the clerical work. There are men to receive goods, men to wrap up small parcels, men to pack goods in bales and cases, others to see to their despatch, and others, again, to deliver them by motor van. Probably, too, there are many selling departments for many kinds of goods, and staffed with numerous salesmen and assistants.

### Different Kinds of Business.

Nor do businesses engaged in different trades differ in their organization as much as one might at first expect. The small man may be a retail or a wholesale dealer. As a retailer sells to the public at large, it is the wants of the individual consumer that he seeks to supply; and he sells, therefore, single articles. Usually it is the wholesaler who supplies him in larger quantities with the goods he needs; and the manufacturer, producer, or importer supplies, in turn, the wholesaler with larger quantities still. A trader is a man who buys goods, and sells the same goods over again; and that is the nature of a trader's business, whether it be wholesale or retail—whether the articles dealt in are sold singly or in bulk. The manufacturer, however, buys labour as well as goods. He uses the labour to turn the material he buys into different and more valuable things before he sells.

The term "manufacturer" or "producer," used in its widest sense, would include the mining industry, iron and engineering works, spinning, weaving and clothing factories, paper and flour mills, biscuit, soap, and chocolate works, and many other undertakings. But, as such businesses are mostly large ones, our small man may be represented under this head by the building and property-repairing trades—by the master joiner, plumber, and painter, by the working electrician, smith, or engineer. The peculiarity here is that it is services far more than goods—services of the proprietors themselves and of their workmen—that these businesses have to sell.

It may be services entirely that are sold, as in the business of haulage contractor or motor-coach hirer, of the manufacturer's selling agent or the auctioneer, of the hairdresser or the laundryman. As some of these businesses supply the wants of individuals, they resemble the retail trade; and it is as retail shopkeeper or master tradesman that the small man is mostly to be found.

### Similarity in their Activities.

Still, however various the businesses be that he engages in, something is bought and sold in all of them.

In all the chief activities of the business are buying and selling goods, making and receiving payments for the goods bought and sold, the manufacturer's payments including, in addition, sums for the wages of productive labour. Then both he and the trader pay wages for labour that is not productive, in the sense that it does not change the goods it handles into other forms, but is merely an expense incurred for the purpose of making sales.

All three types of business men, moreover, house their businesses. They pay the expenses of premises—expenses for rent, rates, lighting, heating, cleaning. They provide equipment such as machinery, fixtures, and furniture; and, as these wear out, the cost of them must be recouped out of the profits on the sales.

These businesses, too, incur charges for travellers kinds of *work* that most businesses have in common.

## The Position of the Office.

Its situation will probably be the first question to arise in regard to the office. In a business of ordinary size it is likely to be placed in the same premises as the warehouse, sales-shop, or

*By permission* *The B.T.H. Co., Ltd.*

A Typewriting Office

Lighted by "Eye-Rest" indirect fittings equipped with X-Ray Reflectors and Mazda Gasfilled Lamps.

or advertisements to sell their goods, for correspondence, account-keeping, stationery, stock-keeping, packing materials, carriage, postages, and so on.

We may say, then, that whether the small man be retailer, wholesaler, or manufacturer—whether he sell goods, or goods and services, or services only—his business activities resemble those of all other business men, great or small. And, in considering the question of organization, it is not the kind of *business* that will interest us most in any particular case; but the several workshop. Frequently it is given a position at the entrance, so that visitors to the business stumble into the office first; but sometimes it is placed in the background, or out of the way.

Which position is selected depends on what kind of business is carried on. For example, it would be in his office near the entrance to his works that a joiner and shopfitter would conduct his dealings with the public. The men he employs in his workshops are not salesmen, and the interviewing and serving of customers is not their job.

But in the retail shop the conditions are quite different. There the public has little need of the office and the information the office can supply. It is the goods offered for sale that retail customers want above all to see. They seek the shop or showrooms where the goods are displayed, and the assistants who exhibit them.

## The Wholesale Trader's Office.

In wholesale trade, conditions are something between these extremes. Office transactions with the wholesaler are more frequent than with the retailer. The wholesale trader sells on credit, and every settlement a customer makes means some dealing with the office; whereas, in the retail, transactions are usually for cash taken at the counter when the sale is made. In the wholesale, too, the appeal for custom is not so blatant and insistent that everything else must give way to it.

It is in this class of business, therefore, that the situation of the office becomes a debatable question. Some wholesalers place the office close by the entrance, on the ground floor. Others follow the theory that it is not the receiving and paying of money that makes their profits, but the selling of goods. They keep their goods to the fore, believing that the more inducements to buy they place in the customer's path the more sales will they make, and the greater gain will they reap. Yet the office is a place of very frequent reference for the members of the staff; and time and labour will be saved by having it in a situation readily accessible to all.

## The Enquiry Counter.

When callers do come to the office they should be treated with respect, and in a free and open manner. The little foot-square enquiry window to be knocked at and patiently waited at for answer, the air of secrecy and shut-outness that it, and the closed door, and the bare expanse of surrounding partition give, the not-wanted-here impression that the caller receives, are not in any possible view the best introduction a potential customer, or anyone else, can get.

Business is much more likely to be induced by a feeling of openness given in one's dealings; and a counter at the office entrance is more suitable than a window for the transaction of the kind of business that callers have to do.

Some matters must be dealt with in privacy, more or less; and for these the owner, unless in a very small way, will need a private room. Access to this should, if possible, be gained from the area just outside the office counter. Persons having interviews may then be passed quickly and unobtrusively in and out.

## Arranging the Office.

For the rest, where a number of clerks is employed, one room of sufficient size for all is the best. Partitions and small offices for different duties only impede the work, and prevent adequate supervision. Desks all but free from pigeon holes and drawers are also best. Receptacles, seldom kept tidy, where papers get hidden and lost should be proscribed. This means that some other suitable place for everything should be provided, and that all things be put away daily in the places appointed for them. A large cabinet of wood or steel for letters, orders, invoices, receipts, and so on, or in its place a series of small but substantially-made files to stand on a shelf, a rack to hold books in use during the day, a safe for security of cash from thieves and of the more important books and documents from fire by night would all be needed. A place should also be kept for preserving in order, and properly labelled, old papers and books that are not likely to be required for reference, but are not yet so far out of date that they can be destroyed. Receipts should be kept for six years, after which time ordinary business claims cannot, as a rule, be enforced. Invoices and the ordinary run of letters need not be kept so long.

## Desks and Light.

For typing and for some other kinds of work low, flat desks or tables are most suitable; but for book-keeping a high, sloping desk that will hold three good-sized account books, all open for use at one time, is probably to be preferred. One of its advantages is that the book-keeper can stand at his work for a change. Besides, while standing he can probably get through his work with greater freedom and speed.

The desks should all be so arranged in relation to windows that daylight falls from the right direction, so as not to cast a shadow on one's work; and, unless the artificial light is fixed at suitable points, much of it will be wasted. The desks should, also, be so arranged that each member of the staff is easily accessible to every other member. This and the other arrangements suggested all make for economy and efficiency in working.

## Divisions of Office Work.

The main divisions of office work are correspondence, book-keeping, and handling cash; and each of these will be dealt with in some detail hereafter.

There is other work, however, to be seen to in the office, e.g. the granting of credit to customers. The giving of quotations, and the recording of orders received and of their execution, may be part of the general office duties; or it may belong to a sales manager's department. Record of orders given out should also be kept, either in the general office or, if the business is big enough to justify it, in a separate buying office. And statistics prepared to keep the owner informed

about sales, travellers' turnovers, stocks on hand, expenses incurred, and such like, will be needed in the keenly managed business. Whether these statistics are simple or elaborate will depend greatly on the proprietor's personal fancies.

## Sales Organization.

The small business usually sells but one kind of goods. If, however, it proves successful, the proprietor will probably try to make it more successful still by adding other kinds of goods, one by one. It is then usual to keep the different wares in separate "departments," in order to show the turnover of each department, and what each contributes to the profit of the house as a whole. For that purpose the purchases, sales, wages, and stocks of each department are kept account of separately; and that can be done without much extra work. The expenses chargeable to each are, on the other hand, usually estimated only, as many of these expenses (office costs, for example) cannot be accurately apportioned; or, where they could be, the information thus gained would not be worth the labour it entailed.

As the business grows some of these departments may be put in charge of departmental managers or "buyers," each manager running his department on his own responsibility. To encourage him to do his best, as if the business were his own, he will probably be remunerated in large part by a commission calculated at a certain percentage of sales, or of sales over a given amount of turnover; and thus the commission will vary in proportion to the business his department does. That is a recognized way of securing keen management by deputy where the business has become too big for the proprietor to run the whole himself. And, if a manager is to do as well for a master as he would for himself, he must be treated pretty much as if he were working for himself. The manager who fails to "make good" in such conditions will, of course, have to give place to someone who can do better.

## The Sales Manager.

The "sales manager," if the business is such that it can boast of an official with that name, will control the travellers and selling agents of the business. He will have a daily report sent in by each traveller along with the orders taken; and, unless the traveller gets very far afield, he will interview him every Saturday morning at the least. The sales manager will be interested in the advertising, whether by newspaper, catalogue, or hoarding. He will watch what spaces are taken and what goods are advertised. He will see to the sending out of samples before and after enquiry for them, and to the giving of quotations. It will be for him, through his staff, to try to turn enquiries into orders—to follow the enquiries up with personal calls or with letters. He will be concerned with seeing that actual orders are executed quickly and correctly. He will deal with complaints about defective quality and service; and he will try to perfect the routine of execution, with the view of reducing as much as possible the chances of mistakes being made. Some of this routine will be referred to again.

## The Manufacturer's Costs.

Of matters peculiar to the manufacturer, as we have described him, mention may be made of his costs of production. The chief elements of production cost are wages, and materials, and power. To keep a check on the first some record should be made, not merely of the time each worker works, but of the time spent by him on each different job. That is what the jobbing property repairer, and others like him, would do. It is, also, what is done in the big business that is engaged on distinct jobs, such as the erection of a building, or the making of an engine; or in the business that turns out numerous articles all of one kind, as so many rolls of woollen cloth, or so many thousand jars of a single kind of jam.

The worker may be required to fill in each day a time sheet showing on what work he has been employed during the day, and for how long on each job. The time sheet will be signed by his foreman. Or, he may be given a card, and be required to have it marked in a time-checking clock, morning, noon and night, until he finishes the job he is on, and gets a new card for the next.

In many businesses, however, that method is not suitable for costing. In the making of various kinds of clothing it has been the practice to pay by "piece work," that is, to pay a stated sum for each part of the making. Now the trade boards established by the Government have fixed minimum rates of wages on a time basis for the trades concerned. With the object of encouraging quick production many employers pay bonuses, over and above agreed piece rates, to the workers that earn at these rates more than a stipulated sum. When there is plenty of demand for his goods, the more a manufacturer can produce, the more he will sell. Besides, the more he can speed up the human factor in production, the more value will he get out of machinery which he must keep running whether the output be large or small.

## Keeping Check on Materials.

As regards keeping check on the materials used in the class of trade last mentioned, there is fixed beforehand a certain way of laying out the patterns by which the cloth is cut for garments of every kind and size; and the cutters must get a required number of garments out of the length of material that is given to them. The master joiner or plumber, on the contrary, probably looks over the job after his men have

finished, and notes what materials they have used. He charges for these and for the time occupied.

Constructional work on a larger scale is carried out according to drawings and schedules of materials and quantities previously prepared. Formal records are made at the time of issue of all stores given out and of all materials specially purchased for every job. Stores are not issued by the storekeeper except on presentation of a request form signed by the foreman responsible; and materials to be bought specially are not ordered except on a similar request signed by the man who puts the job in hand.

## Cost Accounts.

A separate cost account is kept of each job or contract. To this account there are charged week by week the wages for all time expended on that job, also the cost of all materials and stores used. A proportionate part is then added for the cost of machinery and power, for other works' charges, and for general expenses. A fair idea of the rate to charge on each job for general expenses can be obtained by noting the rate that the total expenses of the preceding year bears to the total value of the goods manufactured and sold during the year. Cost accounts are useful for showing whether jobs, when completed, pay or not; and they serve as guides in estimating for similar work at future times.

## Value of Routine.

Organization means first the drawing up of a plan according to which all parts of the business activity are to be carried on. The original plan, if found to be faulty, may, of course, be amended from experience. But there should be a recognized routine within which, with some little latitude, every activity of the business must be kept. When the best way of doing a thing has been discovered, that should be the way for it always to be done until that way can be bettered.

If a thing is required always to be done in one way, it gets done more quickly in that way than if a choice of ways were permitted. Everyone knows, too, how it is to be done—how, for example, a copy of a letter is to be made, how it is to be kept for reference, and where it can be found when wanted.

## Assignment of Duties.

Again, certain persons should be assigned certain duties, and should be required to perform these duties, and not other duties assigned to other persons. Everyone knows then who does this or that part of the work, and who is responsible when anything goes wrong with any part. Where several persons do the same kind of work, for example, the checking of goods going out or the typing of the invoices for them, some number or initials or mark should be made on the order or entering slip, to show by which of the assistants that particular part of the work was actually carried out. If questions afterwards arise, reference can then be made at once to the persons concerned.

Similar considerations apply right through the whole course of the business activities. It is where methods are loosely organized that mistakes most frequently occur, that work gets jammed and processes out of gear—where persons are left too much to follow this or that whim or fancy of their own, or to omit part of the routine because they are pressed with work and think that the omission does not matter.

## Routine not to be followed Blindly.

Still, what is written here is not intended to mean that routine must be followed blindly. Vigilant and intelligent interest should be commended. If, to an assistant, something appears irregular he should be encouraged to draw attention to it, and not to pass it by, as if he were merely a machine, on the excuse that the routine enforced does not provide for any query to be made at that point.

Even the best of schemes is never perfect; and the way to improvement is by bringing thought to bear on the remedying of its faults, or by remodelling on a cleverer plan. Any improvement that saves mistakes, or saves time, soon saves money, too.

## Advantages of the Big Man.

The big man and the big company enjoy very great advantages over a small competitor. Their large capital enables them to produce or to stock a greater variety of goods. It enables them, also, to hold out during depression or against unexpected trouble that would bring the small man down. The big business, having many customers already for some kinds of its goods, can more easily get these customers to buy other kinds as well, than the small man can induce altogether new customers to come to him for his limited variety of wares.

Then, the big man has all the prestige of his reputation as a big man, so that the givers of big orders rely on him with confidence, when they would be doubtful of the smaller man's ability to handle successfully orders of the size they give.

## Advantages of the Small Man.

But the big man has his disadvantages, too. His business is too large for him to give personal supervision to detail, as the smaller man can. He deals with customers altogether by deputy, and their orders tend to receive only routine

attention, whereas the small man adds to the routine of execution that personal contact with the customer and intimate knowledge of his wants which mean a great deal.

Again, having only himself in control the smaller man can, if necessary, change his policy or plans more quickly than the big-business proprietor can. The latter has to lean on a number of sub-managers, some of whom may be less inclined than himself to make the change,

CHAPTER II

## THE LETTERS OF THE BUSINESS

THE letters that come into, and the letters that go out of, a business are probably the chief channels of communication and relationship between the business and the rest of the commercial world. They are, therefore, a vital part of the organization. We deal, first, with those that are received through the post.

*Photo* *Kealeys, Ltd.*

COUNTRY ORDER DEPARTMENT
(Messrs. W. H. Hayden & Co., Ltd.)

and therefore slow to fall into line. A team of mixed temper is always more troublesome to manage than a single willing horse.

Further, the big man tries to keep himself posted regarding the course of his business by means of written statistics and reports. These are likely to grow in bulk as he asks for more and more information that he misses. In the big establishment that is continually happening. Elaborate statistics and reports, however, are costly to prepare ; in fact, the cost of administration of the big business is usually high. But the small proprietor, seeing for himself and learning at first hand all that goes on in his business, keeps his costs of supervision low and yet maintains efficiency at the highest pitch.

### The Inward Mail.

The morning delivery of letters is usually the heaviest of the day. That the letters be opened as soon as possible is important, so that those requiring attention may be passed on in good time. The proprietor may open all the letters himself, and it will pay him to get to business early, as in his absence the first hour of his assistants' day may be mostly wasted. When opened, the letters should be sorted in batches according to their nature, and each batch handed over to the person whose duty it is to deal with it.

### Contents of the Mail.

The contents of the mail will include orders, let us hope ; and remittances when customers'

accounts come due. There will be invoices and statements of account from suppliers of goods; perhaps acknowledgments of orders given to them, or letters asking for orders or for instructions about orders already in hand. There may be complaints from customers. Now and again these will be frivolous; but in the well-conducted business serious complaints should be few.

The routine of dealing with inward invoices and statements of account will be treated of later. Remittances received go to the cashier for entry in his Cash Book. Cheques should be crossed; and after being endorsed they will, along with other cash, be paid into the bank at once, receipts being sent to the payers.

## Enquiries and Quotations.

There should be orders and reports from travellers; also enquiries from possible customers for samples or patterns, and for prices. It would be well to deal with these enquiries just as carefully as if they were actual orders. Enquiries about the same goods have probably been sent to others. The man that quotes the lowest price for the same quality of goods is likely to get the order. But the prices that several people give may differ very little, and then the securing or the missing of the order may turn entirely on the care and obligingness with which the enquiry has been answered.

Quotations either are delivered through the hands of the local representative, or they are sent to the enquirers direct, and copies of them are posted to the representative so that he can keep in touch with the enquirers until the orders are definitely obtained or lost.

## Complaints.

Complaints should be answered fully and tactfully. They should be looked into carefully by the proprietor himself, or by someone on whom he can thoroughly rely. Carelessness should always be brought home to the guilty assistant, with the view of preventing repetition of the fault. A customer will usually overlook one mistake, if it is not a bad one, and if he finds that it is genuinely regretted; but he will not tolerate the annoyance of their recurrence. When they do recur his custom goes elsewhere.

## Orders and Letters.

Before they are distributed letters and orders should be stamped with the date of receipt. Where the letters and orders are not passed on to departments, nothing beyond the documents themselves, so stamped, may be required in the way of record. But, if the orders are not to be executed at once, they should be entered in detail in an Order Book, and the entries indexed.

All documents of one kind should be kept in one place, so that any one of them can be found there easily and quickly, should it be wanted. Orders for immediate execution, for example, should be kept together in a clip or box or file. They should not be mixed with those for future execution, or with those that have been executed already; nor with enquiries waiting attention, or letters about accounts or other matters. After they are executed, and the goods despatched, the orders should go on the Orders Executed File, and be kept there for future reference.

## Register of Orders Received.

In passing orders on to departments it is advisable to make a register or record of them at the time they are passed on, and to fill in later in the register some particulars of execution. The following would serve as a simple form of such a record—

REGISTER OF ORDERS RECEIVED

| No. of Order | Date received | Customer's Name and Town | Department | When executed | Invoice amount | How sent |
|---|---|---|---|---|---|---|
| | | | | | | |

The purpose of this book is to help to trace any order should the customer write about it; also, to show whether orders are executed promptly or not, and what orders remain in hand at any time. The number given to the order in the book will be stamped on the order itself, so as to identify it with the entry. A serial numbering stamp can be used for this purpose.

If the orders dealt with were so numerous that this register became too big for easy reference, several books could be used—one, for example, for names beginning with letters A–D, another for E–K, and so on. Or the register could be kept in loose-leaf form, separate sheets or leaves being given to each initial. Old leaves could be removed, when done with, to another binder, so as not to make the current register too bulky.

With variations to suit the conditions of businesses of different kinds, the order itself, or an extract from it, would be in the hands of the assistant when he got the goods ready for despatch. It would pass with the goods to the despatch room, and would be returned to the office after despatch of the goods, so that the entry could be completed in the Register of Orders Received. It would then be filed away under its name or number.

## Letter Registers.

Sometimes a register like the above is kept for letters to show when they are received, to whom they are passed on, and when they are answered

and filed. Whether this would be useful or not in his particular business the reader can decide for himself. Routine of this kind should not be multiplied beyond the point at which it continues to serve some useful, practical purpose; and the simplest routine that will meet all essential needs is the most efficient.

## Typing and Copying.

Nowadays all big businesses use the typewriter, and nearly every small one owns at least one machine. The typewritten letter looks better than the handwritten one, and it is easier to read. For these reasons it makes a better impression on the receiver. Further, by the use of carbon leaf, a copy of the letter—or more than one copy, if needed—can be made at the same time as the original. And the copy, being on a loose sheet, can be attached to the letter it answers, both being filed away together.

Letters are usually dictated to a shorthand-typist, who brings them to the dictator for signing when they are ready. There is considerable difference in ability and proficiency amongst typists; and one that is quick and accurate, and knows the work thoroughly, is worth looking for.

Important communications received by telephone should be written down at the time. Those despatched by telephone or telegram should be confirmed by letter the same day.

## Co-ordination of Correspondence.

It would be well if all correspondence with customers were dealt with or were supervised by one person; and one person would probably be able to deal with all in a business of only moderate size. He could dictate the letters from notes of instructions received from departmental assistants. Making one person responsible would give more unity to the correspondence, and would improve its quality, provided it were in competent hands. Where various persons dictate the letters sent out, a customer may receive communications—perhaps two or three on one day—that are so diverse and unrelated as to give an impression of want of co-ordination in the sender's business.

## Quality in Letter Writing.

As letters are the chief means of keeping in touch with customers, actual or potential, it is worth while to take much care and trouble with them. They should say clearly what is to be said, and should tell the person written to just what he wants to know. Nothing is more exasperating than a letter so written that the reader cannot be certain what it means, or one that fails to give the information that the receiver asked for. (Reference should be made to Section 17, Letter Writing for the Business Man.)

## And in Stationery.

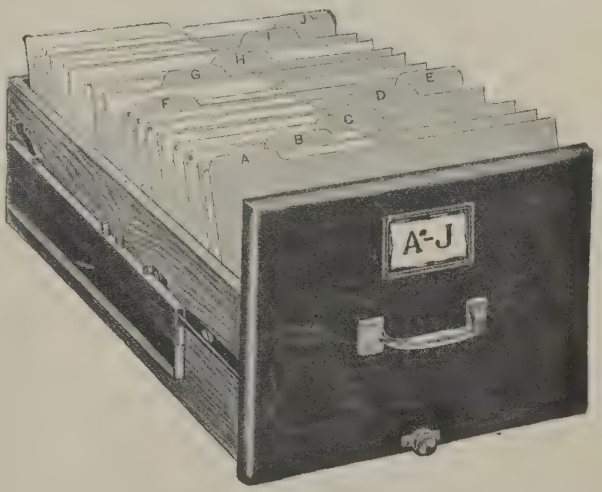
A similar consideration of quality applies to the stationery used. It should not look shabby. Without being costly, paper and printing, both, may be pleasing in appearance. In these days of advertisement it should not be forgotten that the business letter heading has an advertising value.

## Handwritten Letters.

If the business is so small that it cannot afford a typewriter and a typist, the letters may be handwritten in duplicate by means of carbon leaf. When that is done a good thin carbon should be used; but even then the result is not so presentable as the letter typed on a writing machine. In the days when letters were all written by hand special copying ink was used, and copies were taken in a copying press on the damped leaves of a tissue-paper copy-letter book. The disadvantages of this process are that the book must be indexed, which takes time; that copies of letters written to the same person over a period of time are in different parts of the book; and that the copies are kept in one place—the book; whilst the letters they answer are to be sought in another place—the inward-letter file. The typewriter has now made the copying press almost obsolete.

## The Filing of Letters.

By "filing" is meant the putting away of letters and other documents to preserve them from damage, and the arranging of them in such manner that any document can afterwards be




Single Drawer of Vertical File Arranged Alphabetically

turned up instantly, when wanted. For letters the best file is the Vertical File, of which the first illustration represents a single drawer, and the second a cabinet of several drawers. For letters, too, an alphabetical arrangement is, as a rule, the most convenient.

The drawer of a vertical file is about 12 in. wide, by 10 in. deep, by 24 in. long. In the bottom of the drawer, running from front to back, is a thin metal rod on to which are threaded a number

VERTICAL FILE CABINET OF SEVERAL DRAWERS

of stiff *guide cards*. At the top of each guide card is a projecting tab bearing a letter of the alphabet; and behind each guide card are arranged the letters from and to those correspondents whose surnames have for initial the letter that the guide card bears. The letters are placed between the guide cards without being folded or fastened in any way. They stand upright, on edge; and it is this feature that gives the file its name of "vertical."

## Folders.

A folder or cover of thick paper is provided for each regular correspondent, and within this all letters from and to him are kept in the order of their dates. The folder, containing all the recent letters inwards and outwards of any given person, may be lifted out of the file, and the whole or part of the correspondence consulted with the utmost ease. A vertical file may consist of several drawers each having allocated to it a portion of the alphabet. The illustration shows how one drawer can be added to another as the correspondence grows.

For easy reference, where the file is a big one, the section for each initial may be subdivided by means of intermediate guide cards lettered, for example, BA, BE, BI, BL, BO, BR, BU, BY, or in any other suitable way. When a file becomes full all letters before a given date may be removed in small batches to cardboard cases; or the whole of the contents of a drawer that has ceased to be in current use may be taken out bodily and placed, in undisturbed order, in a wooden box of the same dimensions as the drawer.

## The Flat File.

Vertical filing cabinets are made of wood or of steel; and, of course, are fairly costly. If the cost be an objection to their adoption, the "flat" type of file may be used. In its commonest form the flat file is like the backs of a book. This form is made to stand on a shelf as a book does. Inside the covers is a double arch of thick wire. The letters to be filed are punched to fit on to the wires, and the arches are opened by means of a spring, so as to permit of letters being put on or taken off. The contents of the file are arranged alphabetically; and loose sheets of thick tough paper, each marked on the projecting margin with its own initial, are interspersed among the contents to serve as a partial index. As with the vertical file, letters may be inserted in the flat file or extracted from it, at any point.

## Exact Order Essential.

Whether a vertical or a flat file be used, the letters must always be kept in strict alphabetical order. Each letter has then its proper place on the file, just as each word has its own place in the dictionary. To find a letter that is wanted one turns immediately to the exact point where the letter should be kept. Dictionary order requires that the letters be arranged according to the surnames of the correspondents, going first by the initials. Where initials are alike the second letters of the names will probably determine the order; but, if these are also alike, the third will be taken, then the fourth, and so on.

As an illustration the following names, all

beginning with letter P, are arranged in dictionary order—

| | | |
|---|---|---|
| Palgrave | Pickersgill | Potter |
| Palmer | Pickstone | Poulson |
| Paterson | Pilling | Preston |
| Pears | Player | Pretyman |
| Pearson | Plumtree | Pringle |
| Peel | Podmore | Pugh |
| Pemrose | Poole | Pym |

James Smith would go before John Smith, because the A of James comes alphabetically before the O of John; and Thomas Brown of Leicester would be placed before the same name from Peterborough. A letter from the Postmaster, Dublin, should be filed under D, and one from the Postmaster, Edinburgh, under E.

## Advantages of Vertical File.

One advantage of the vertical, as compared with the flat file, is the larger capacity of a single file. This means a greater range of reference. The arch of the flat file prevents that file from taking more than about 3 in. deep of papers, because more would strain the fastening. Another advantage is that, there being no fastening in the vertical file, letters are extracted or inserted simply by lifting them out of or into the file. In the flat file the letters above the place required have first to be turned back over the arch. The letter is then put in or taken out, and the upper contents of the file are turned down again into their normal position.

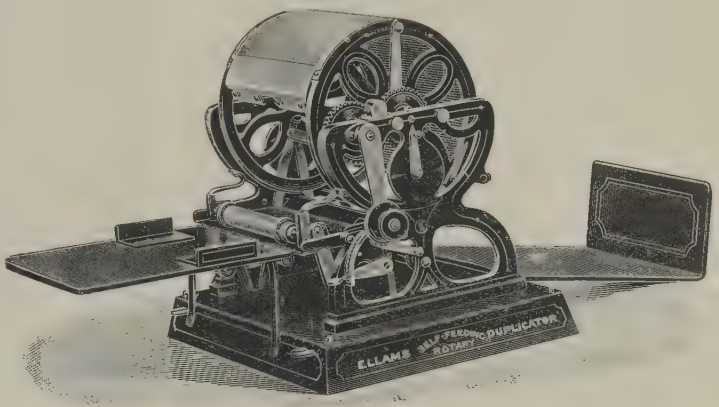
## Filing Invoices and Receipts.

This greater ease of insertion and extraction is an advantage when the vertical file is used for *letters;* but documents such as invoices and receipts are often filed away in a permanent numerical order instead of the alphabetical one. The invoices or receipts are first numbered consecutively and then put on the file in the order of their numbers, the original sequence never being afterwards altered. Additions to the contents of the file are put on the top of what are already there—they are not inserted as letters are, here, there, and everywhere amongst the documents already filed. In these conditions the fastening is something of a benefit rather than a defect; and the flat file, because it keeps the contents neat and straight, is then to be preferred.

## Circularizing.

Two machines are used in the office for circulars; one for printing them from a stencil, the other for addressing the envelopes or covers in which the circulars are posted. The printing machine is commonly called a duplicator; but, as "duplicate" means merely a second or double copy of a document, the name is not a good one. The machine will make many hundreds of copies of a letter, and to call it "multigrapher" or some such name would denote its purpose better.

The stencil is cut on special wax paper on an ordinary typewriter, when the inking ribbon has been moved out of the way. It is then fixed on the drum or rollers of the printing machine. With each turn of the handle a sheet of letter-paper




passes round the rollers, and ink is transferred from the rollers on to the letter-paper by being pressed through the type perforations of the stencil. The illustration shows one of these machines. Other makes are the Roneo Duplicator and the Gestetner Cyclostyle.

## Printing from Type.

Some machines used in the office print the circulars direct from type; but they are probably too costly for the limited needs of this kind that the small business has. Besides circulars, some of the office forms and other stationery for use inside the house may be printed cheaply in this way.

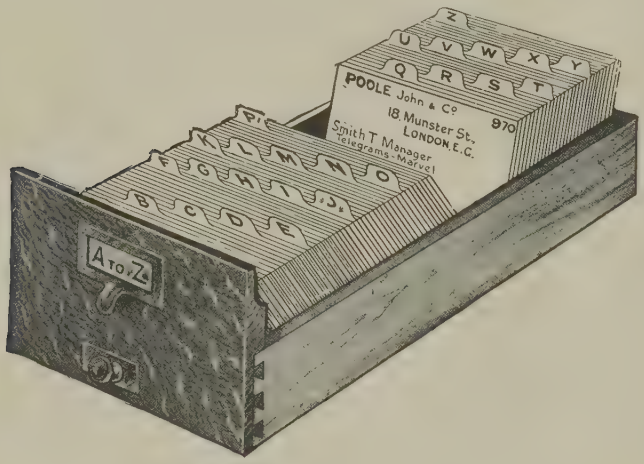
## Addressing Machines.

The addressing machines are of two kinds. The Addressograph uses tin plates embossed with the addresses to which the circulars are to be sent. Others print from stencils framed in cardboard and cut on the typewriter. A small addressing machine would be worked by handle, and a bigger one by treadle. The biggest and dearest, for heavy, continuous work, is driven by a small motor switched on to the electric wiring of the office. The plates or the stencils are kept in trays in alphabetical or other order, like the cards of a card index. A full tray is placed on end on the table of the machine, the lower end

of the tray having been removed. The machine, set in motion, picks the lowest plate from the tray, and then the next, and next again, printing the address from each plate in turn, and replacing it in order in an empty tray fixed below the table. By using a different treadle any address can be skipped in the printing, or it can be printed continuously any number of times. (*See also* Section 15, "Office Machines and Appliances, and Labour Saving Devices.")

## Card Indexes.

The card index, though not an essential part of the correspondence system of the office, may conveniently be described here. It is constructed




Card Index, Single Drawer

on the same principle as the vertical file, but on a smaller scale, the commonest size of card being about 5 in. by 3 in. There are initial or index cards as in the vertical file; but between these, instead of the folders and letters of the vertical file, the card index has only other cards that we may call "name cards."

## Uses of the Card Index.

In business one of the best uses of the card index is as an index of customers. Each name card has written or typed upon it the full name and address of the customer, his telephone numbers, telegraphic address and codes used, together with any further information that can be usefully and conveniently put on the card.

The card index is very suitable for many other kinds of records; for example, for lists of manufacturers and of the articles they supply; for condensed records of the trade done with customers, a card of fair size being used for each; for records of customers' financial standing and of anything affecting the credit to be allowed them; for lists of shareholders in companies; for publishers' lists of subscribers to periodicals. Customers' ledger accounts are sometimes kept on cards instead of in a book. The card index is used, again, as index to the vertical file, when the letters in the latter are not kept alphabetically, but in folders arranged numerically. In all cases the cards are ruled to suit the particular purpose in view.

## Its Advantages.

The advantages of the card form of index over the book form are that each addition to the contents is inserted in strict dictionary order; that names no longer in current use can be removed to an out-of-date drawer, leaving only "live" names on the index in use; that cards of different colour may be used to indicate some distinction in the customers—for example, pink cards for all customers carrying on one kind of business, and green or blue or yellow cards for those carrying on another kind. The card index can also be expanded indefinitely merely by bringing more drawers into use. At no time in its growth is there any need to re-write the whole index, as has to be done when an index in book form becomes filled. Where the index is a large one the initial sections can be subdivided in the same way as those of the vertical file.

## The "Kardex."

An improvement on the card index, called the "Kardex," keeps the cards overlapping each other in strips, say fifty in a strip. The name then appears at the foot of each card on the part that is not covered by the overlapping card above. Each card is placed in a pocket with a transparent front that allows the name to be seen, and the pockets are so arranged that all the names on the strip are in view at the same time.

## The Vowel Index.

An index in book form, such as is commonly used as part of a bound ledger, has one opening or section for each letter of the alphabet. All names beginning with B, for example, are placed in the B section. But, as each entry is made at the time the name first occurs, those beginning with the same letter are not in any order amongst themselves. If the B names, for example, occupy two or three pages, it takes some little time to pick out a particular name. It will be found helpful, therefore, to have each section subdivided

into six—one subdivision for each of the vowels of the alphabet, as below—

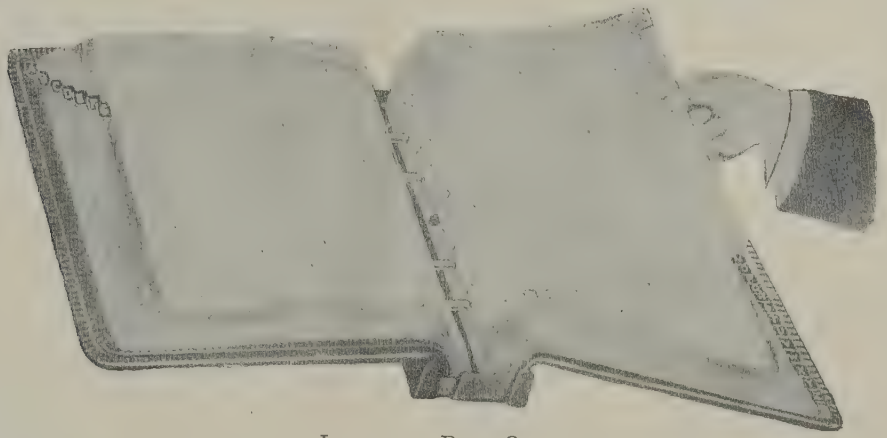
VOWEL INDEX—B OPENING

| | PAGE | | PAGE |
|---|---|---|---|
| A | | E | |
| Barker & Co., J. | 129 | Bell Bros. | 292 |
| Black & Green | 44 | Bennett, A. J. | 126 |
| I | | O | |
| Briggs & Co., Ltd. | 32 | Brown & Bentley | 111 |
| Bibby & Clarke | 306 | Bolsover Colliery Co. | 86 |
| U | | Y | |
| Burton & Sons | 200 | Bryant & May | 178 |

## Loose-leaf Books.

Many of the merits of the card record are to be found, also, in loose-leaf books. In these books the leaves are separate loose sheets, held together merely by pressure applied at the back of the strong cover in which they are contained. The pressure can be relaxed, so that leaves can be inserted or extracted at any point. It follows that the leaves can be kept always in strict dictionary order, just like letters in a vertical file. The index of such a book need not, therefore, consist of anything more than loose stiff sheets (like the guide cards of the vertical file) interspersed throughout the book, and each bearing an initial tab. It is more usual, however, to number the sheets in the initial sections, beginning at No. 1 in each. Thus, if the book is used as a ledger, Jenkins' account may be found on sheet J 12, and Bentley's account on sheet B 29. When that arrangement is adopted, the initial sheet of each section contains a list, in vowel-index form, of the names and numbers of all the accounts opened in the section.

Loose-leaf books may be conveniently used for any set of records when it is desirable that each new record sheet shall be inserted amongst the others in alphabetical order, or according to some other pre-arranged plan.



LOOSE-LEAF BOOK, OPEN

# CHAPTER III

# ROUTINE OF PURCHASES

THE purchase may arise out of the buyer's asking for samples and prices, or out of the seller's submitting these without being asked to do so. It may be a purchase for immediate delivery of goods the seller has ready in stock; or it may be one of goods yet to be made for delivery in the future. Delivery, again, may be required all at once on a date named or the arrangement may be for delivery by stated instalments over a period, or just as the purchaser needs the goods and gives instructions for them to be sent.

## The Order or Contract.

An order placed for a large quantity for future delivery, either all at once or as required, is usually called a "contract." It is important in these cases that the order be given in writing and be signed; also that it be acknowledged by the seller's sending to the buyer a signed "copy-order" form containing all particulars. There can then be little room for dispute afterwards about the kind of goods, the quantities required, the price to be charged, the time for delivery, the date for payment and the discount to be allowed.

## Orders Over £10 in Value.

It should be noted that, even when delivery is to be immediate, an order for goods of £10 or more in value cannot be enforced in the Courts unless

the party seeking to enforce can produce a memorandum of particulars signed by or for the other party; or unless the buyer has not only received the goods, but has shown in some way that he has accepted them; or unless he has made payment in whole or part, or has given or done something of value to the seller for the purpose of making the bargain binding.

It does not follow, however, that all orders of £10 or more in value are written and signed; or that, because they are not written and signed, the parties afterwards seek to evade liability for them. Were such proceedings general business men would lose all confidence in each other. Want of confidence would prevent bargains being entered into freely as they are now. Buying or selling would be restricted mostly to ready-money and cash-with-order transactions. The making of contracts for future performance that was uncertain would only be resorted to in so far as modern conditions of life require that provision be made long beforehand for the meeting of future wants.

## The Order Book.

Still orders, even of small value, are as a rule written in some form or other. A common way is to write the order in duplicate, by carbon-leaf, in a special order book. One of the copies, being perforated for tearing out, is then given or sent to the supplier of the goods. The other is retained in the book for reference. The order and copy usually bear a serial number as well as the date, and frequently the number is required to be quoted on the invoice for the goods.

As suggested above, orders should state the quantities, and describe the goods, accurately and clearly. They should also give instructions about time and manner of delivery. If the account is a new one, the order should state, further, the time of payment and the rate of cash discount.

In small businesses it is not likely that any record of the order will be needed beyond the copy retained in the order book; but in big businesses orders for purchases may have to be passed through a buying department or buying office, or may be required to be authorized and signed by certain persons. And some formal record of orders placed may be kept day by day or week by week to show the extent of the commitments entered into.

## When the Goods Arrive.

Two things go together here—the receiving of the goods, and the passing of the invoice. The invoice should be checked with the goods to see that the quantities invoiced are received, and that the goods received are of the quality and description charged for. But the invoice should also be checked with the copy kept of the order given for them to see that the quantity, quality, and price charged correspond with what were ordered. If the order has been fully executed a note, with the date of delivery, should be made to that effect on the copy or other record of the order. This will show that an invoice for that order has been passed, and will prevent another invoice being passed for it in the future, should another one be received.

When the order has been only partly executed, note should be made of what part of the goods have been received, and of the date. If further instalments arrive they will be noted in the same way until delivery is completed.

## Goods Received Book.

For a small business the foregoing procedure should suffice; but in a big establishment it will be advisable to keep a Goods Received Book in the receiving room. The following is a specimen form for an entry in this book—

GOODS RECEIVED BOOK

No. of entry_____ Date_____

Railway or other carrier_____

From what town_____

Sender's name_____

Number and kind of packages, and marks:

Weight_____carriage paid, or to pay_____

Nature of the contents:

For what department_____

Invoice date_____Amount £_____

Department's signature_____

The man in charge of the receiving room should not part with any goods received until an invoice for them has been presented to him by the department claiming them. The date and amount of the invoice should be inserted in the entry to which the invoice corresponds; the number of the entry should be placed on the invoice to connect the two; and a signature in the book should be obtained from the department when the goods are handed over. Questions will arise from time to time that a book like this will help to settle. Another purpose that this book serves is the checking of the railway companies' inward accounts.

## Checking the Invoice.

To return to the invoice, it must be checked to see, also, that the calculations have been made correctly. The routine of checking will be carried out more neatly and thoroughly if the invoice is first impressed with a rubber stamp as shown in the illustration. The person responsible for each step in the checking places his initials in the space provided for them. Invoices are often passed in very loose ways; yet this work of receiving

goods and passing invoices is every bit as important as the handling of cash. The goods are as

| |
|---|
| Goods checked by_____ |
| Order „ „ _____ |
| Calculations by_____ |
| Invoice passed by_____ |

valuable as the cash, and the invoice for the goods should be dealt with quite as carefully as the cheque given in payment of them.

## Carriage and Packing Charges.

In this connection two further points need to be carefully watched—first that of carriage, secondly that of the wrappers and cases in which many of the goods are received. The carriage must be watched to see that nothing is paid by the receiver on goods that should arrive carriage paid. Where carriage has to be paid it must be watched to see, also, that the goods are coming by the cheapest route, and that they are not being charged at a higher rate, or on a greater weight, than they should be.

The best way to deal with charges for wrappers and cases is to deduct them from the invoice when the calculations are being checked. Empty wrappers and cases should be returned to the senders without delay; and, unless the charges for them are crossed off the invoices, there is always some likelihood of their being paid by mistake, or of their not being charged back when the empties are returned.

## A Simple Record of Purchases.

Perhaps the simplest way in which the "small man" can record his purchases is to put the invoices, after they have been checked, in a box file. This is a file in the shape of a shallow box with a lid, and with a spring inside to hold the contents down. The box stands on its end on a shelf, just like a book; and it keeps the invoices much tidier and cleaner than the spike file does, which is still so much in use. The invoices are kept in the file temporarily until the creditors' statements come to hand. They can be put in the file in alphabetical order, so that all invoices from the same person automatically come together.

When a statement arrives it is checked with the invoices it represents, is discounted ready for payment, and is fastened on the front of the invoices. On payment of the account the statement can be detached and sent along with the cheque; but as soon as it comes back receipted it should be re-attached.

## Filing After Payment.

The record of the purchase, dealt with in this way, consists of a debit to Purchases Account in the Ledger, posted from the entry of the payment in the Cash Book. The receipted statement, with the invoices fastened to it, is kept as a voucher for the correctness of the entry of the payment. If all entries of such payments are numbered consecutively in the Cash Book, each receipt with invoices attached can be numbered the same as the corresponding entry, and can be filed on a flat file in the order of its number. Or, if preferred, the receipts and invoices can be filed alphabetically in a vertical file under the names of the suppliers of the goods. This method of recording purchases saves the keeping of Ledger accounts for creditors; and, when any question arises about the goods or about the sums paid, the file can be referred to for particulars.

## Purchases Journal.

The arrangement outlined above would be workable where the invoices received were not numerous, and where many different creditors were not involved. If inward invoices were numerous, too big a bulk of papers would be held up pending the arrival of the creditors' statements and the making of the payments. Continually handling these papers and keeping them in order would take up a good deal of time; and, if they were not kept in order, reference to them would be a trouble very trying to the temper. In such circumstances they would have to be disposed of permanently at the time they were passed. They would be entered at the time of passing in a Purchases Day Book or Purchases Journal.

## Filing After Entry.

The pages of this book should be numbered consecutively, and the lines of the pages should also be numbered, beginning at 1 on each page. Every invoice entered could then he marked with its page and line of entry, and all could be filed

101 PURCHASES JOURNAL

| Returns. | | No. of Line. | Date. | Name of Supplier. | Led. Fo. | Amount of Invoice. | Departments. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dep'm't. | Amount. | | | | | | A. | B. | C. | D. |
| | | 1 | | | | | | | | |
| | | 2 | | | | | | | | |
| | | 3 | | | | | | | | |
| | | 4 | | | | | | | | |
| | | 5 | | | | | | | | |
| | | Etc. | | | | | | | | |

away, once and for all, on a flat file in the order of their numbers. Each entry is posted to credit of a Ledger account bearing the name of the supplier of the goods. If the posting in the account is made to show the number of the invoice, then reference can be made, when necessary, direct from the Ledger to the invoice on the file.

## Departmental and Total Purchases.

The Purchases Journal would be added so as to give monthly totals of the invoices, and these totals would be posted month by month to debit of Purchases Account. Thus, at the end of the year or half-year, Purchases Account would show what value of goods had been bought during the period.

Were the business large enough to be run departmentally, the Purchases Journal might contain extra columns, one for each department, as in the ruling given above. The amount of each invoice would then be entered in the amount column, and extended into its proper departmental column as well. The total of the amount column would be debited to Purchases Account, as before. The departmental totals could be summarized month by month, or week by week, elsewhere.

## Returns and Debit Notes.

When goods are returned or an allowance is claimed, a debit note should be sent to the supplier of the goods. The following is a suitable form—

DEBIT NOTE

20 Finsbury Hill,
LONDON, E.C.2_____19__

Messrs. Rutherford & White,
Leicester,

Debited by ANDERSON & BROWN.

| | | | | | |
|---|---|---|---|---|---|
| 20 | doz. No. 239 Stockings | 23/6 | 23 | 10 | – |
| | Returned because inferior to sample. | | | | |

A common procedure is to write the debit note in duplicate, using carbon leaf. One copy is sent to the supplier to whom the returns are being charged back. The other copy is entered in the Purchases Journal, the amount being placed in a column reserved specially for returns. The copy itself is then filed away in its order amongst the invoices.

Each single entry of returns is posted in the Ledger to debit of the supplier of the goods, and the total of returns at the end of the month is deducted from the total of the purchases before the latter is debited to Purchases Account. The returns column should be analysed so that the returns of each department can be deducted from the purchases of the department at the end of the month.

## Fixing and Marking Prices.

A trader's *cost* prices are, of course, those shown on his inward invoices. The way in which he fixes his *selling* prices can best be explained by an example. Suppose an article costs a retailer 2s. 11d. If he aims at getting a gross profit of 25 per cent on his selling price, he will make 3s. 11d. the selling price. In trade, gross profit is usually reckoned as a percentage of the *selling* price; and to get a gross profit of 25 per cent or a quarter of the selling price a trader adds one-third to the cost. A wholesale merchant who aimed at a gross profit of 12½ per cent or one-eighth of selling price would add one-seventh to his cost. Goods bought at 21s. he would sell at 24s. Most business people are aware that a certain percentage of selling price is not the same percentage of cost; but many could not say off-hand just what the difference is. The table that follows will suggest the relation between the two—

| | | | | |
|---|---|---|---|---|
| 10% | or $\frac{1}{10}$th | of selling price | = $\frac{1}{9}$th | of cost. |
| 12½% | „ $\frac{1}{8}$th | „ „ | = $\frac{1}{7}$th | „ |
| 15% | „ $\frac{3}{20}$ths | „ „ | = $\frac{3}{17}$ths | „ |
| 20% | „ $\frac{1}{5}$th | „ „ | = $\frac{1}{4}$th | „ |
| 25% | „ $\frac{1}{4}$th | „ „ | = $\frac{1}{3}$rd | „ |
| 30% | „ $\frac{3}{10}$ths | „ „ | = $\frac{3}{7}$ths | „ |

There are numerous articles of such kinds that the retailer's selling prices can be marked upon them, or on tickets attached to the articles, or on the boxes that contain them. This is the readiest way for a retailer to keep record of the selling prices fixed for his goods. At times, however, he wants to refresh his memory about what he paid for the goods; and very often he marks his cost prices also on the articles. He does this as the goods come in and are checked off with the invoice. At stocktaking, particularly, this ready record of cost prices saves a deal of time.

## Markings in Code.

Selling prices may be marked on the goods in plain figures; but cost prices are given in a private code. The code may consist of letters each substituted for a figure, or it may be a set of symbols that are neither figures nor letters, and are invented specially for the code. When letters are used they can be remembered better, and they give rise to fewer slips, if they are the letters of a word or phrase as in the following examples—

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| D | U | R | H | A | M | C | I | T | Y |
| S | T | O | C | K | B | R | I | D | G | E |

The last letter of the second example can be used for repeating another letter that would otherwise be doubled. In that code 29/11 would be written TD/SE; and 33/6, OE/B.

Where the goods dealt in are of such nature that prices cannot conveniently be marked upon them, lists of prices for both cost and selling must be kept. In wholesale houses salesmen usually carry a pocket price list. And, as both goods and prices change frequently, it is an advantage to have the book in loose-leaf form. It is then an easy matter to take out a leaf when it becomes obsolete, and to substitute a new one in its place.

## Expense and Capital Purchases.

So far we have been dealing with purchases of goods to sell again. Every business, however, buys goods or services that are not for sale—goods or services that it is necessary to use up in the conduct of the business. Stationery and packing materials are examples of such goods; labour of clerks or of selling assistants is an example of services. The use of premises may have to be purchased and paid for by rent, or the use of borrowed capital by interest. And there are rates to pay to the local authority, and taxes to the Government, for the costs of municipal and national administration. These things cannot be sold again as their values to the business are all exhausted in the using of them. They are commonly called "expenses" or "expense purchases." The record that is kept of them must be distinct from that of goods or labour which will be sold, and the value of which will be got back with, it is hoped, a profit in addition when the sales take place.

Then there is a third kind of purchase, commonly described as "capital expenditure." This refers to purchases of articles of permanent equipment, that can be used over and over again, and whose values do not perish in a single using as those of expense purchases do. Because of this difference the whole cost of expense purchases must be met out of the profits of the current period of trading; but, as regards the objects of capital expenditure, it is only the depreciation of their values during the period that must be so met.

## Rents, Rates, Etc.

The routine of passing invoices or charge notes for capital purchases and for expense purchases is the same as that of purchases for sale. But for rents, rates, lighting bills, and such like, it is usual to receive one demand note only, instead of an invoice when the goods are delivered and a statement of account when payment is becoming due. Payment of each such account has, therefore, to be made on the original demand note.

The simplest record is merely to enter the payment on the credit side of the Cash Book when the payment is made, and to post that entry to debit of Rent and Rates Account, or Electricity Account, or such other account as the case requires. A separate Ledger account should be kept for each head of expense, to show at the end of each trading year what has been spent under that head in the year.

Capital expenditure, too, should be recorded in a few separate accounts under heads such as Buildings, Machinery, and Fixtures.

## Expenses Journal.

In a large business an Expenses Journal is often used in addition to the Purchases Journal already explained. All invoices and demand notes in respect of expenses and capital expenditure are entered in this book, each item being

EXPENSES JOURNAL

| Debits. | | No. of Line. | Date. | Name of Supplier. | Led. Fo. | Credits |
|---|---|---|---|---|---|---|
| Account. | Amount. | | | | | |
| | | | | | | |

EXPENSES JOURNAL (*continued*)

| Rent and Rates. | Light and Heat. | Packing. | Carriage. | Stationery. | Repairs. | Sundry Expenses. | Capital Exp. | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Account. | Amount. |
| | | | | | | | | |

posted to the credit of the Ledger account of the supplier of the goods or service. The book may be ruled as shown in the illustration; and the total of each expense column is posted month by month to the debit of the expense account named in the heading of the column. The items in the Capital Expenditure column are debited to one or other of the capital expenditure accounts. Where an Expenses Journal like this is kept, the invoices entered in it are numbered, and filed on an Expense Invoice file, in the same way as invoices entered in the Purchases Journal.

## Passing Accounts for Payment.

As previously stated payments are usually made on statements of account rendered periodically by the creditors. The method of dealing with these and with the relative invoices, when Ledger accounts for the creditors are not kept, has also been described.

Where Ledger accounts for the creditors have been opened each statement should be checked item by item with the account, and the items should be ticked on the statement if they are correct. When a difference appears reference must be made to the invoice file to settle whether it is the Ledger or the statement that is wrong. Care should be taken to deduct from the statement any returns or other debits shown in the Ledger but not allowed on the statement. The statement should then be discounted; and when the discounting has been checked and initialed, the statements are ready for the cheques to be written out.

## The Statements and the Cheques.

If there are many of them it is advisable to arrange the statements in exact alphabetical order before the cheques are drawn. Should there happen to be two statements for one account, this will bring both together and exclude any chance of double payment being made. The statements will be placed before the principal who signs the cheques. After the cheques are signed, but before they are sent off, the payments and the discounts should be entered from the statements into the Cash Book (*see* Chapter V) and the amounts then checked back to the cheques.

## Posting to Ledger.

The entries will be posted to the debit of the creditors' Ledger accounts as in the following example—

RUTHERFORD & WHITE,
HUMBERSTONE MILLS, LEICESTER.

| 192– | | | | £ | s. | d. | 192– | | | | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mar. | 12 | Returns | 29 | 23 | 10 | – | Mar. | 5 | Goods | 117 | 164 | 5 | 6 |
| Apr. | 3 | Cheque & discount | 301 | 218 | 4 | 5 | | 18 | ,, | 129 | 77 | 8 | 11 |
| | | | | £241 | 14 | 5 | | | | | £241 | 14 | 5 |

## Receipts.

In the Cash Book the entries of the payments should be numbered. The receipts obtained, or the receipted statements returned, should also be numbered to correspond, and then filed away in the order of the numbers. Every receipt of £2 or more should bear a cancelled 2d. stamp. A penalty is payable for omitting to stamp a receipt of £2 or more. Before a court of law will receive as evidence of payment an unstamped receipt of such amount it will send the receipt to be stamped, and then the penalty will be enforced by the Revenue Office. For any accounts paid in notes or coin a routine similar to the above should be observed.

## Cash Discount.

The discount that is allowed on payment of accounts is called "cash discount." It varies in rate according to the particular trade, and according to the length of credit taken by the debtor. By far the most usual rate is 2½ per cent for monthly payment; but the month in this connection is not always of the same length. To say that the terms of payment are "2½ per cent monthly" may mean: (1) that invoices from the 1st to the 31st of March are due for 2½ per cent discount on or before 10th April; (2) that invoices from 20th February to 19th March are due on 10th April for 2½ per cent; or (3) that invoices from 1st to 31st March are subject to 2½ per cent discount if paid on or about 1st May. The last-named period of credit is called a "clear month"; the first two are "short" months. In the last case prompt payment, that is payment within a week or so of the date of invoice, would command a discount of 3½ or 3¾ per cent. In the others the prompt discount would probably be 3 per cent only. But in certain trades accounts become due for 2½ per cent discount, or even less, in a week from delivery of the goods. In others, again, the whole of one month's transactions may be settled for a discount of 3½ or 3¾ per cent on or before the 10th of the month next following. In all cases of delayed payment the whole or a part of the recognized discount will be forfeited by the payer.

## Trade Discount.

Cash discount is not deducted when the invoice is sent for the goods. It is offered as an inducement for payment to be made when due, and it is allowed only if the payment is made in time. On the other hand, what is known as "trade discount" is taken off the invoice. That, however, has no connection with the time of payment. It is an allowance in reduction of the price at which the goods are bought. Whilst the rates of cash discount do not usually exceed 5 per cent, those of trade discount are seldom less than 10 per cent, and may be as much as 50 per cent, or even more.

*By permission* *The B. T. H. Co., Ltd.*

A Well-Lighted Office

("Eye-Rest" indirect fittings equipped with X-Ray reflectors and Mazda gas-filled lamps.)

Discount differs from interest in not being calculated at a given rate *per annum*. If, for example, an account of £100 is discounted at 5 per cent, it is reduced to £95. On the other hand, interest at 5 per cent per annum on £100 for three months would amount to only three-twelfths or one-fourth of £5, namely £1 5s.

## CHAPTER IV

## ROUTINE OF SALES

THE routine of sales has already received attention to some extent. In Chapter I mention was made of the control of travellers and salesmen, and of the handling of enquiries. In Chapter II the recording and the execution of orders received and the filing away of the order sheets were dealt with.

### Granting Credit.

The most usual procedure in retail business is to sell for ready cash, though the giving of credit to customers is fairly frequent also. With the wholesale trader and the manufacturer, to sell on credit is the rule. But neither wholesale dealer nor manufacturer is so foolish as to open an account with a new and unknown customer until some enquiry has been made about him. No sensible business man is going to supply goods on credit, at reasonable price, without some assurance that he will be paid. The enquiry he makes may take several forms.

### Trade References.

If the order has been procured by a traveller he should be required to report what he knows, or what he has been able to learn, about the new customer. And, unless the customer is known to have a well-established and successful business, the traveller should ask for trade references. These consist of the names of houses from whom the new customer has been accustomed to buy, and the traveller sends the names in with his order and report. The houses whose names are given are asked by post, or by calling upon them, for their experience of the customer—how much credit they have found it safe to give, whether the customer pays regularly, and whether he always pays in time for full discount. As a rule, two references should be tested so that the replies may be compared, and on the nature of the answers the question of granting or refusing credit is decided. It is scarcely necessary to add that a stamped envelope should always be enclosed when the answer is required by post.

### Status Enquiry Offices.

Another method is to seek information through a status enquiry office. Such offices collect information about the standing and reputation of traders and others. For a certain yearly subscription they supply a book of enquiry forms for the number of reports that the subscription covers. Should they not have on their files, or in their registers, any information, or any that is up to date, about the subject of the enquiry, they find out what is wanted, if they can.

### References to Banks.

Another method, still, is to refer to the customer's bank instead of to a trading house. The enquiry, in that case, must be handed to the enquirer's bank for the latter to obtain the report. Banks do not answer such enquiries except when they are made by other banks. It is only sometimes, however, that a banker's reference yields a satisfactory reply. Banks do not care to commit themselves in making these reports, as misrepresentation, even though unintentional, is actionable at the instance of the party misled or of the party reported upon. Very often answers given by banks are couched in such general terms that they are of little service as guides in the giving or withholding of credit.

A trader answering such an enquiry can furnish just the kind of information that the enquirer wants, and trade references usually bring more definite replies than the banks give. But traders, too, should give their reports with caution and in confidence, because either the new customer or the enquirer may later find himself aggrieved with the result. The new customer may be aggrieved if he discovers that the report was unfavourable to him, and thinks that it was unjust; the enquirer, if the report given him was a good one, and he afterwards forms the opinion that it should not have been so good.

### Record of Status Reports.

Special record should be kept of the answers that all references bring. A good plan, perhaps, is to file away together the reports obtained about each person or firm, and to give them a number. At the head of the Ledger account a note can be made of the number of the reference, together with the limit of credit to be allowed and an indication of the substance of the report. As the reports are filed away in the order of their numbers, any particular report can be turned up instantly, when fuller information is wanted than that which the Ledger heading gives.

### Authorizing Execution of Orders.

Even when an account is an old one this question of the granting of credit must never be lost sight of; but should be considered with every order that comes in. It may be necessary, now and again, to hold new orders back because payment is in arrear, or because the account has gone beyond its credit limit. As soon as orders are received

*Photo* *Kealeys, Ltd.*

SECTION OF A GENERAL OFFICE

(Messrs. D. & W. Gibbs, Ltd.

*Frontispiece*

they should be handed to a person held responsible for the credit given in customers' accounts or in a section of them. Every order he passes should be initialed by him, and no order should be executed until his authority for its execution has been obtained. In the despatch room the goods should not be allowed to go out until this authority has been seen by the person responsible for despatch.

## Checking Goods Out.

There is another duty of the despatch room every bit as important as seeing that goods are not sent out until authority is given. This other duty is to see that all goods sent out are charged up. Before goods leave the selling department for the packing and despatch rooms they are entered in a rough Sales Book. The entries in that book should be made in duplicate by carbon leaf. The slip containing the carbon copy is perforated so that it can be torn out of the book. Each slip or docket for each entry should also be numbered with a printed serial number. If this number is shown on the invoice, when that is made, reference from the invoice to the docket in the entering book will be facilitated.

The docket torn from the book passes to a checker in the packing-room who checks the goods with the docket to make sure that all goods going out are charged; and, what is scarcely less important, that all goods charged are being sent. No parcel should ever leave the premises until this check has been made. The person who checks should initial the docket; and when the packer is another person, he should initial, too. If this routine is carefully followed, omission and other mistakes in regard to quantities will be prevented. By this procedure it should be possible to locate such carelessness and to bring home the blame; also to discover attempted theft of goods passing through the despatch room, and to confront the culprit.

Where canvas wrappers, or boxes, or hampers are used for packing, the despatch room staff must see that they are charged out as well as the goods.

## Despatch of the Goods.

Someone, moreover, must see that packages are sent by the route or in the manner that any customer specially requires. Whether any particular parcel is, by exception, to be sent carriage paid instead of carriage forward, must also be watched; and whether or not any carriage that is paid has to be charged to the customer.

A duplicate of the consignment note given to the railway carman, or some other slip or entry, must be kept for every package as it actually leaves; and on this slip or entry the signature of the collector of the goods must be obtained. When a customer complains that some parcel has not reached him this record is turned up to ascertain if the parcel actually left. Should a package be lost in transit, as happens at times, the signature of the carman is needed to prove that the goods were given into the carrier's hands. These slips or entries are required, further, to check the railway companies' accounts for carriage outwards, unless the carriage is payable by the consignee, or has been paid by the sender at the time of despatch.

## Recording the Sales.

The invoice that goes to the customer is typed from the entry that remains in the rough Sales Book of the selling department. Two of these books should be in use; and, when one is in the department being entered, the other should be with the invoice clerk. Several times during the day the books should be changed, so that the invoicing will always follow closely on the entering. Each entry in the book should first be extended and totalled, next the calculations should be checked, and then the invoice made. Invoices should be typed in duplicate; and the carbon copies, kept and filed, become the basis of all the entries of sales made in the books of account. The invoices themselves must be sent to the customers without delay, so as to be in their possession when the goods arrive. In retail trade particularly, a shopkeeper finds it very annoying that an invoice has not come to hand when he wants to get the packages out of the way, and the goods marked off so that they can be passed into stock and offered at once for sale.

INVOICE

20 Finsbury Hill,
London, E.C.2. _____19__

Mr. George H. Green,
310 High Street, Colchester,
*Bought of* **ANDERSON & BROWN.**

| | | | £ | s. | d. |
|---|---|---|---|---|---|
| 2 | pieces Madapollan—<br>40½, 41¼ = 81¾ yds. . . | 1/4¾ | 5 | 14 | 1 |
| 1 | doz. Men's Pyjamas . . ea. | 8/9 | 5 | 5 | – |
| 3 | „ Ladies' Black Cashmere Hose . | 26/3 | 3 | 18 | 9 |
| | | | £14 | 17 | 10 |

By L. & N.E.R. goods train.
Carriage paid.

## Entering up the Books.

After the invoices have been typed and sent off—usually the morning after—the carbon duplicates are entered in the Sales Day Book or Sales Journal, which is ruled similarly to the Purchases Journal, as shown on page 387. These duplicates of outward invoices are then numbered and filed away in exactly the same manner as the inward

invoices entered in the Purchases Journal. The entries are posted singly to the debit side of the customers' accounts in the Debtors Ledger. A separate account (similar in form to the creditor's account shown on page 390) is kept for each customer. The invoice number for each debit can be given in the account so that, when necessary, reference may be made direct from the Ledger to the invoice on the file. The Sales Journal is added to the end of each month, and the monthly totals are posted to the credit side of a Sales Account in the Ledger. Month by month this Sales Account shows what the sales of the business have amounted to since the beginning of the current trading year.

When the selling side of the business is organized in several departments, a column for each of the departments appears in the Sales Journal. This, again, is the same method as was explained for the Purchases Journal; and by means of these columns the sales for each department, as well as the purchases for each, are ascertained.

## Crediting Returns.

Regarding goods returned by customers, it is best, where the volume of such transactions is considerable, to keep a separate Returns Journal in which to enter these. As soon as it is decided that the returned goods be taken back a credit note is typed in duplicate, the carbon copy being

CREDIT NOTE

HUMBERSTONE MILLS,
LEICESTER,_____19_

MESSRS. ANDERSON & BROWN,
20 FINSBURY HILL, E.C.2.

*Credited by* **RUTHERFORD & WHITE.**

| | | | £ | s. | d. |
|---|---|---|---|---|---|
| 20 | doz. No. 239 Stockings . . . | 23/6 | 23 | 10 | – |

retained. The other copy is sent to the customer as a notification that the value of the returned goods has been allowed in his account. The same procedure is followed when allowances are made to customers in respect of overcharges and of imperfect goods. It is from these carbon copies of credit notes sent to customers that the Returns Journal is written up, the Returns Journal and the Sales Journal being in exactly the same form. The copies of the credit notes are numbered and then filed by themselves on a flat file, in the same way exactly as the copies of outward invoices are dealt with. Each entry in the Returns Journal is posted to the credit side of the Ledger account of the customer concerned. The monthly total of returns can either be posted direct to the debit of Sales Account, or be deducted in the Sales Journal from the total of that book before that total is posted to credit of Sales Account.

## Sales for Ready Cash.

The routine just outlined is suitable for wholesale businesses where sales are made on credit, and where any cash sales that may take place form only a very small portion of the whole. Retail shopkeeping trade, however, is usually carried on for ready cash, and a different procedure is necessary there. The recording of a shopkeeper's cash sales is, indeed, a part of his business that should be very carefully organized, and very closely watched. Many retailers find by unpleasant experience that their arrangements in this respect permit a dishonest assistant far too easily to evade the making of a record for every sale he effects; or that they permit him to record a sale, now and again, at less than the amount he actually takes.

## The Check-Book System.

One of the commonest ways of dealing with cash sales is to give the customer a bill torn out of a counter check-book, and to keep a carbon copy of the bill as a record of the sale. Both bill and duplicate are handed in at the cash desk along with the money. The bill itself is stamped and returned to the customer. The duplicate is also stamped to show that it has been paid, but it is retained. These check books, as supplied by the printers, contain two sets of numbers. First of all each book has a number; and No. 3 books, for example, are to be used by No. 3 assistant only; No. 4 books by assistant No. 4. The number of the book is printed on every check and duplicate in the book. But the checks and duplicates in each book are also numbered consecutively—1, 2, 3, 4, and so on.

## The Daily Summary.

First thing every morning, from the duplicates taken at and collected from the cash desk, a summary should be made of the sales of the day before. The following form will serve—

CASH SALES, 20TH NOVEMBER, 19__

| Book No. 1. | | | Book No. 2. | | | Book No. 3. | | |
|---|---|---|---|---|---|---|---|---|
| Check No. | Cash. | Credit. | Check No. | Cash. | Credit. | Check No. | Cash. | Credit. |
| | | | | | | | | |

The checks from each book should all be entered in numerical order, and care taken to see that, in the summary of any day, each book is

made to start with the check number immediately following the last of the day before. The summary will then show a blank whenever a duplicate is missing, and will in that way prevent checks being intentionally or unintentionally kept back or destroyed. As, in many shops, sales are made on credit as well as for cash, two sets of money columns should be used as shown in the ruling above.

The total of the cash sales of *all* the books will give the cash takings of the day. It will be entered in the Cash Book on the receipts side, and extended into a "cash sales" column, the total of which at the end of each month will be posted to the credit side of Sales Account in the Ledger.

The total of the credit sales for all the books should agree with the total credit sales entered for that day in the Sales Journal. These, as explained before, are posted singly to the debit of customers' Ledger accounts; and month by month they are posted in total to the credit of Sales Account. It may be noted here that this summary can be used to save departmental dissection of the sales in the Sales Journal, or elsewhere.

## What the Summary Does not Show.

Though the daily summary of the checks shows when any check is missing, it does not show when a sale has occurred without a check having been made out at all. Nor does it show when a duplicate of a check has been filled in for a less amount than the customer has paid. To prevent such practices being attempted it is commonly required that every check and duplicate be initialed by a supervisor in the shop or department before the cash is handed in. Whether that is done or not, the person who makes the summary should also be required to scrutinize the duplicates, and to report suspicious alterations made on them.

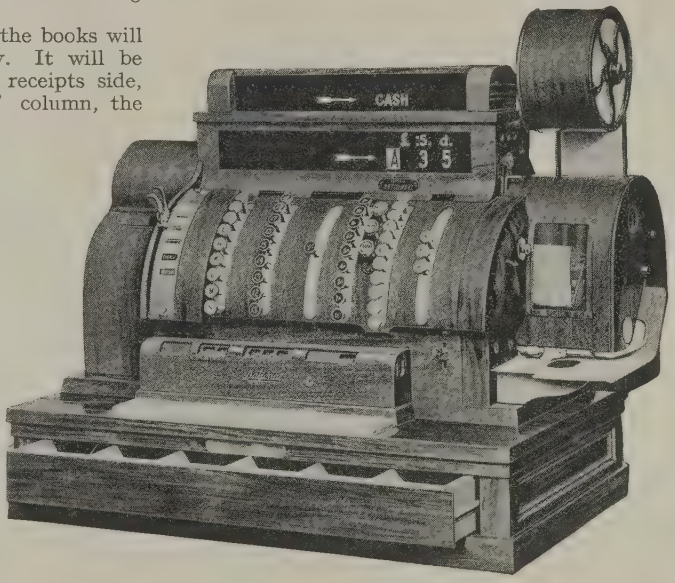
## The Cash Register.

A newer method of dealing with cash sales is to use the registering kind of till known as a "cash register."

The illustration above represents one of the many makes of machine. (*See also* Section 15, "Office Machines and Appliances.")

## How it Checks the Takings.

On every occasion when a register of this kind is used, the opening of the till rings a bell. In other words, it makes public announcement, to all who are within hearing and who care to watch, that cash is being received. At the same time the figures of the amount put into the till are prominently displayed to view. This is done by depressing the keys that correspond to the sum taken. The depression of the keys also causes a record of the amount to be made on a




National Cash Register

roll of paper fixed inside the machine. In such a procedure the assistant who erred through carelessness would stand a good chance of being put right by the customer; and, in face of the publicity given to the transaction, the assistant who was dishonest would scarcely venture wilfully to display an amount less than the one he had taken. So long as he dares not display less than he takes he cannot record less; because: (1) the impression on the record strip is made by the same operation as displays the sum spent; (2) the record strip is locked inside the register out of the assistant's reach, and the key is held by someone else. Even then it is a printed record that could not easily be tampered with.

Should the till be opened without the amount being displayed, a tell-tale blank would show on the record strip. Nothing would be recorded but the assistant's initial, or the letter assigned to the till that had been opened. Were the money for a sale not taken to the register, the absence of the sound of the bell would probably be noticed by other assistants, or by the person in charge on the floor. Further, the only receipt or receipted bill that this system provides for is

one given by the register itself and printed with a duplicate of the internal record that the register makes.

## How it Saves Clerical Work.

These registers, moreover, are adding machines that deliver at the close of each day the total of the sales recorded for the day. Some of them contain separate cash tills for several assistants. Thus do they make each assistant responsible for the accuracy of his or her own takings, a separate addition for each till being made by the machine. Some of these registers too, are furnished with keys to depress for separate records of cash sales, of payments received for credit sales, and of money returned or paid out. The adding and recording mechanism saves clerical labour in summarizing, dissecting, and totalling the sales. It does by machinery automatically, in less time and at lower cost, what would otherwise have to be done more laboriously and less accurately by human head and hand.

Many of the registers may be electrically operated, so ensuring more equal wear of the parts and giving greater speed in action.

Such a routine for registering sales dispenses with the cash clerk, distributes the responsibility for the keeping of the cash taken, and allocates the blame when an assistant's till is wrong. Not the least of the benefits of using cash registers is that they save customers' waiting after their purchases are made, congesting busy counters whilst their bills are being conveyed to, and their change returned from, a cash desk at a distance. (*See also* Section 18, ORGANIZATION AND ROUTINE OF A RETAIL SHOP.)

## Collection of Accounts.

Various terms of credit and discount, allowed for the payment of accounts, have previously been mentioned and need not be repeated. The first step in collecting money due for trade debts is to send out statements of account to the debtors. These should be prepared and sent out promptly and regularly. Debtors who are loth to part with their money, and those who have little to part with, will not then have opportunity of making the excuse that the statement was late in being received, or that their pay-day had passed before the statement came to hand. It is well to mark the statements with the rate of discount that will be allowed for payment by a day named, for example, "2½ per cent, 10th Oct." When an account has passed the date for 2½ per cent discount the statement can be marked, for example, "1½ per cent, 10th Nov.," thus giving the debtor notice that the account has been owing too long for the full discount to be allowed.

STATEMENT OF ACCOUNT

Folio 226. 20 FINSBURY HILL,
LONDON, E.C.2., 30*th Sept.*, 1923.

MR. GEORGE H. GREEN,
310 HIGH STREET, COLCHESTER.

*Debtor to* **ANDERSON & BROWN.**

| | | | £ | s. | d. | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|
| 1923. | | Balance as advised | | | | | 4 | 6 |
| Sep. | 5 | Goods | | | | 63 | 5 | 10 |
| | 10 | " | | | | 14 | – | 6 |
| | 12 | " | | | | 25 | 3 | 1 |
| | 21 | " | | | | | 15 | 7 |
| | | | | | | 103 | 9 | 6 |
| Sep. | 12 | Returns | | 1 | 11 | 5 | | |
| | 18 | Allowance | | | 5 | – | | |
| | | | | | | 1 | 16 | 5 |
| | | | | | | £101 | 13 | 1 |
| | | 2½% 10th Oct. | | | | | | |

## Taking Bills in Payment.

Some debtors who are short of capital, or whose businesses are not too flourishing, let their accounts run for three months or so until no discount can be allowed, and they do not always pay then. With such customers it may be arranged, as a condition of giving them credit, that they shall accept a bill of exchange for each month's transactions, the bill to be payable, say, in three months' time and no discount to be allowed. The following specimen of a bill of exchange might represent the value of all goods supplied during the month of September by Anderson and Brown to George H. Green. Green's acceptance would be written across the face of the bill in some such terms as these—

BILL OF EXCHANGE

£101–13–0. 20 FINSBURY HILL,
LONDON, E.C.2, 1*st Oct.*, 1923.

a/- *Stamp.*

Three months after date pay to our order the sum of One hundred and one pounds and thirteen shillings for value received.

ANDERSON & BROWN.

MR. GEORGE H. GREEN,
310 HIGH STREET, COLCHESTER.

"*Accepted payable at Barclays Bank, Colchester,*
*Geo. H. Green.*

## The Benefits a Bill Gives.

An accepted bill fixes a date for payment, and action can be taken immediately if it is dishonoured by non-payment. In bringing an action on a dishonoured acceptance there is no need for the creditor to prove that the goods were delivered, or that they were, in any disputed particular, in accordance with the order received for them. For that reason debtors do not like to dishonour their acceptances, and most of them try their

best to meet their bills as they fall due. Another reason is that the bills of exchange are usually presented for payment by the drawer's bank or its agents; and that dishonour in these circumstances makes the debtor's weak financial position more widely known, and damages his reputation with others besides the particular creditor involved in the dishonour.

### Enforcing Payment.

Every effort should, of course, be made to get in overdue accounts; and when letters and interviews all fail steps should be taken to enforce payment, if there seems to be a reasonable chance of obtaining it. The assistance of a debt-collector may be sought, or that of a solicitor. For sums up to £100 the creditor can himself apply for a summons at the County Court. In the High Court, on the application of a solicitor, a writ will be issued for any sum not less than £20.

### Statute of Limitations.

If an ordinary trade account has been owing for more than six years from the date when payment could first be demanded, and if no part of the payment has been received during that time, or no written promise to pay has been made, the debt is said to be "statute-barred." Should an action be brought to recover such a debt the defendant can plead the protection of the Statute of Limitations, and the Court will not then enforce payment. This is an old provision of Act of Parliament. The principle underlying it seems to be that a creditor, who has been too careless to seek the help of the Court whilst the circumstances were fresh in mind, does not deserve that help afterwards, when reliable evidence to substantiate his claim is more difficult to obtain. But, if, when the debt became due, the debtor was out of the country and so out of reach of the law, the statute would not begin to operate until he returned.

### Interest on Accounts.

Should it be intended to demand interest on an overdue account, written notice to that effect must be given to the debtor. The notice is often printed on the statement form. Interest can be demanded from the date when notice was given; but until notice is given it cannot be demanded unless the debtor has agreed to pay it. On the other hand, when a bill of exchange is dishonoured, interest begins to accrue from the date of dishonour without notice being given.

### Legal Tender.

Cheques and bills are not legal tender; that is, they are not a form of money that a creditor is by law obliged to take in payment of his account. As a trader's cheque or bill carries no guarantee of payment, it would not be fair to creditors to compel them to take payment in that form from persons they did not know. Legal tender—the form of payment that a seller or creditor must accept—is—

Bronze coins up to 1s. in one amount.
Silver „ „ 40s. „ „
Gold coins, Bank of England notes, and Treasury notes up to any amount.

Legally the payer should offer the correct amount, as the person to be paid is not obliged to find change. It is also the duty of the debtor to bring the payment to his creditor when the debt is due and payment has been demanded.

## CHAPTER V

## MINDING THE CASH

The first duty in minding the business cash is to see that a record is made for every sum received, the record to show the amount and the sender's name.

### Receiving Cash.

It is easy for the receiver of cash to omit, now and again, the making of this record, particularly when there are many things all pressing for his attention at the same time. If the making of the record is omitted that brings trouble in the daily balancing of the cash, and much time may be wasted in trying to discover how the difference in the balance has arisen. Should the cause not be discovered there may follow trouble more serious still with the customer whose account has not been credited, and who has been asked to pay again. In order to obviate such irregularities a certain routine in dealing with cash received must be enforced, and deviation from that routine must never be allowed.

### Use of Receipt Forms.

The most effective precaution is to insist that every receipt given for money shall be made on

FORM OF RECEIPT

No. D 2481 Date_____19__

RECEIVED the undermentioned sum from

_____

For Anderson & Brown.

_____

£ : :

a printed form torn from a book in which there is retained a counterfoil or a carbon duplicate of the receipt. If the receipt book is a counterfoil one,

it will be easy, again, to write out and part with the receipt proper, but to omit the filling in of the counterfoil. This, also, can be prevented by requiring that the receiver shall, in every instance, insert the name and the amount in the counterfoil before he begins to write out the receipt. Receipts in this form are usually numbered, and the counterfoils or duplicates are numbered to correspond.

## What the Form Must Contain.

Such a routine takes more time than would be needed merely to impress the statement of account with a rubber stamp, and to write in the signature and amount. Its advantage, however, has just been explained, and the disadvantage of taking more time can be greatly lessened by making the form of receipt a small one, gummed at the edge so that it can be affixed to the statement, and by reducing the written part to the minimum. The name of the payer, the amount in figures, and the signature of the receiver of the money are all that is needed in writing. The date can be stamped and the rest of the receipt form printed; but a note of any discount allowed will be necessary on the duplicate. For the purpose of preventing intentional omission to enter cash received, some business houses state on their bill-heads and statements of account that they recognize only receipts given on their official forms.

## Noting the Ledger Account.

Before a receipt is begun to be written the Ledger account of the payer should be looked up to make sure that the payment about to be taken is in order. Whilst that is being done the part of the account that the payment settles can be marked to that effect in pencil. The pencil note will serve as a temporary reminder of the settlement until the cash received is posted. A note of any deduction not agreed to or not yet allowed will also explain in the future how the difference in the account arose.

In many offices—for special reasons, perhaps, in some—the routine is not adopted of keeping check on cash received by means of the duplicate or counterfoil receipt book. Such circumstances make it necessary to exercise the greatest care in order to see that every receipt of money is recorded. The routine should then be that the name of the payer, and the amount of the cash and of any discount, shall be entered in the Cash Book before the receipted account is handed back to the payer, and before the money is placed in the till. Where a debtor sends "in settlement" of his debt a sum that is insufficient, the creditor may keep the money without prejudice to his claim for the balance that is due. On the receipt, however, he should make it clear that he takes the money "on account" or "in part payment" only.

## Entries of Cash Received.

The most usual method is to enter in the Cash Book, on the left-hand or receipt side, the name and amount for each receipt and the discount, if any, allowed. In its commonest form the Cash Book is ruled as shown on page 400. From the Cash Book each entry is posted in the Ledger to the credit of the customer who has paid the money. The receipt forms given are, however, often torn from a book of such shape and size that the duplicates of some six or eight receipts are made, one below another, on a single page of the book. In that case columns for cash and discount can be placed on the margin of the page, and these can be added so that only the totals for each day need be entered in the Cash Book. The postings to customers' accounts would then be made direct from the Receipts Book. Sometimes, again, where a duplicate receipt book in this form is not used, the single entries for sums received are made in a subsidiary Cash Received Book, the total of each day being carried thence to the General Cash Book, as before. The following specimen of a customer's Ledger account shows, not only the posting as described here of cash and discount, but also the posting of sales and returns referred to in Chapter IV—

GEORGE H. GREEN,
310 HIGH STREET, COLCHESTER.

| 1923. | | | | £ | s. | d. | 1923. | | | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| May | 6 | Goods | 128 | 10 | 2 | 8 | July | 7 | Cash. 97 | 25 | 19 | — |
| | 10 | ,, | 137 | 1 | 11 | 9 | | 7 | Discount 97 | | 13 | 3 |
| | 14 | ,, | 145 | 14 | 17 | 10 | | | | | | |
| | | | £ | 26 | 12 | 3 | | | £ | 26 | 12 | 3 |
| June | 3 | Goods | 191 | 20 | 12 | 4 | June | 11 | Returns 102 | 2 | 17 | 6 |

## Recording the Discounts.

The Discounts column on the receipts side of the Cash Book is added to the end of each month, and these monthly totals are debited to Discounts Account in the Nominal Ledger. At the end of the trading year the Discounts Account will show what amount of discount has been allowed to debtors during the period. This amount, of course, reduces the profits on the sales; but it is usually counterbalanced wholly or in part by discounts received on payments for purchases, which are credited to Discounts Account. The balance of Discounts Account, one way or the other, is carried at the end of the year to Profit and Loss Account, along with other balances representing gains acquired or losses incurred.

## Cheques Should be Crossed.

Unless already crossed when received cheques should be crossed at once with a rubber stamp in the manner and for the purpose explained in Chapter VI. It should be the rule to pay them

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into the bank on the day they are received, so that they will be collected from the drawers' banks without delay. Sometimes a debtor, who is being pressed for money, will issue cheques for more than the sum he has at his bank to meet them. He hopes to have enough to meet them by the time they are presented; but the creditor who delays collection of such a cheque may find himself too late and the debtor's funds all gone.

## Payments to Bank Account.

Not only should cheques received be paid into the bank at once, but all notes not needed for office use should be paid in, too. The bank is the safest and most convenient place in which to keep funds that are not immediately required. It is safest because, should the money be stolen or lost whilst lying at the bank, the banker is still liable to repay. It is most convenient because funds at the bank can be drawn upon by cheques, a form of money peculiarly suitable for posting to creditors in payment of their accounts. Cash lying at the office is available for only such payments as may be made in notes or coin.

## The Cash Book.

The Cash Book is usually kept as a two-sided book, receipts being entered on the left-hand side and payments on the right. It is usual, also, to keep separate columns on each side for the bank account and for the office cash. The difference between the cash column for receipts and that for payments shows how much money is lying in the office. An excess in the bank column on the receipts side over that on the payments side represents the sum that stands to the proprietor's credit at the bank; a deficiency represents the extent to which his banking account has been overdrawn. The cash and the bank columns are usually added continuously for a month at a time. The book is then ruled off and the balances are brought down to make a new start at the beginning of each month. Though not brought down in the book except at the end of the month, the balance of the cash columns should be ascertained every day with scrupulous regularity, and checked carefully with the cash the cashier has in his till. This is to make sure, day by day, that every transaction is entered in the Cash Book, and entered correctly.

## Discount Columns.

Commonly, a third column is included on each side of the Cash Book. The one on the receipts side is for discounts allowed to customers when they pay their accounts; the other, on the payments side, is for discounts received when payments to creditors are made. In each case the discount, inserted in the discount column, is entered on the same line as the receipt or payment to which it belongs. At the end of the month, however, the discount columns are treated differently from those for Cash and Bank. A balance is not struck between them; but, instead, the total of each is posted separately to debit and credit of Discounts Account in the Nominal Ledger, as previously explained.

## Reconciliation Statement.

The end of the month is a good time, too, for checking the bank columns in the Cash Book with the entries in the bank pass book. These two books seldom agree, chiefly because some of the cheques entered in the Cash Book, as paid out of

CASH BOOK

| RECEIPTS. | | | | | | | | | | PAYMENTS. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date. | Name. | Fol. | Dis. | | | Bank. | | | Cash. | | | | | | | | | | |
| | | | £ | s. | d. | £ | s. | d. | £ | s. | d. | Date. | Name. | Vch. No. | Fol. | Dis. | | | Bank. | | | Cash. | | |
| | | | | | | | | | | | | | | | | £ | s. | d. | £ | s. | d. | £ | s. | d. |
| 1923. | | | | | | | | | | | | 1923. | | | | | | | | | | | | |
| Feb. 1 | Balances bro't forward | — | | | | 295 | – | – | 12 | – | – | Feb. 1 | Bank | — | con. | | | | | | | 81 | 9 | 6 |
| ,, ,, | Green, Geo. H. | | | 15 | 1 | | | | 29 | 6 | – | ,, 6 | Petty Cash: | — | — | | | | | | | | | |
| ,, ,, | Adams & Gibbs | | | 2 | 6 | | | | 4 | 17 | 6 | | Postages | — | 122 | | | | | | | 3 | 10 | 7 |
| ,, ,, | Horn & Co. | | 1 | 4 | 3 | | | | 47 | 6 | – | | Carriage | — | 137 | | | | | | | 1 | 2 | 8 |
| ,, ,, | Fox & Sons, W. | | | | | | | | | 10 | 9 | | Travelling | — | 101 | | | | | | | 4 | 5 | 6 |
| | | | | | | | | | | | | ,, ,, | Rutherford & White | 226 | 94 | 2 | – | 7 | 79 | 4 | – | | | |
| ,, ,, | Cash | con. | | | | 81 | 9 | 6 | | | | ,, ,, | Hall, Son & Co. | 227 | 208 | | | | | | | | 7 | 6 |
| | | | | | | | | | | | | ,, ,, | Wages | — | 173 | | | | 38 | 4 | 10 | | | |
| | | | | | | | | | | | | ,, 28 | Balances car. forwd. | — | — | | | | 470 | 9 | 2 | | 10 | 18 | 10 |
| ,, 23 | Discounts A/c | 194 | 42 | 1 | 5 | | | | | | | ,, ,, | Discounts A/c | — | 194 | 28 | 19 | 11 | | | | | | |
| | | | | | | £2,274 | 3 | 3 | £2,185 | 11 | 6 | | | | | | | | £2,274 | 3 | 3 | £2,185 | 11 | 6 |

the bank, have not at the time of checking been presented to the bank for payment, and are therefore not entered by the bank in the pass book. A "reconciliation statement" bringing the two books into agreement, should be prepared.

RECONCILIATION OF BANK PASS BOOK WITH CASH BOOK

28TH FEBRUARY, 1923.

| | £ | s. | d. |
|---|---|---|---|
| Pass Book Balance, debit of bank . . . | 563 | 10 | 10 |
| *Add*, paid in 28th Feb., not entered in Pass Book | 46 | 18 | 7 |
| | 610 | 9 | 5 |
| *Deduct*, cheques not presented— | | | |
| C.B. fo. 129 : A.B. & Co. . | 10 | 3 | 9 |
| 130 : C.D. & Sons . | 21 | 5 | – |
| E.F. . . . | 108 | 11 | 6 |
| | 140 | – | 3 |
| Cash Book Balance, debit of bank . . | £470 | 9 | 2 |

This can be written in the Cash Book on the last page of each month, the new month's entries being started on a new page. The above is an example of how a reconciliation statement should be made.

## Transfers Between Bank and Cash.

Where a Cash Book in the form on page 400 is used, all amounts received, whether by cheque or in notes or coin, are entered in the cash column on the receipts side, so as to record the absorption of these receipts into the office cash. When the daily pay-in is sent to the bank it must be entered in the cash column on the payments side in order to record the taking of so much money out of the office cash. Then, in the bank column on the receipts side, a corresponding entry must be made to record the putting of the money in the bank. Neither of the two last entries is posted to any account in the Ledger, because no Bank Account or Cash Account is kept in the Ledger. The only accounts of Bank and Cash are those in the Cash Book itself. As shown in our example each of the two entries is marked "con" in the folio column, the meaning being that the posting of each entry is already made in the other account on the "contra" or opposite side of the Cash Book itself.

## Banking All Receipts Each Day.

Sometimes a rule is adopted that the full amount of each day's receipts must be banked each day.

FORM OF THE CASH BOOK WHERE ALL RECEIPTS ARE BANKED

| Date. | Receipts. | Folio. | Discount. | Details. | Bank. | Date. | Payments. | Folio. | Voucher No. | Discount. | Bank. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

When that is to be done the form of the Cash Book is modified as shown in opposite column.

Each day's receipts are then entered singly in the details column and the total extended into the bank column on the same side. Payments are made by cheque whenever practicable, such amounts as cannot conveniently be paid by cheque being paid out of petty cash, the manner of keeping which is explained below.

## Making Payments by Cheque.

In Chapter III the passing of creditors' accounts for payment was dealt with in some detail. It is very often the rule that these payments must be made by cheque, except in the case of small accounts under, say, £1; and the rule enforced may even require that all the small payments to creditors in any week be lumped together and a cheque drawn to provide cash for the lot. One reason for paying by cheque is that the cheque is the easiest and cheapest means of transmitting money to distant towns. That payment by cheque is safer than payment in notes or coin is a second reason. The cheque, being written out specially for the payment it makes, is drawn for the exact amount. It bears the name of the payee; and it can be so drawn as not to be payable to anyone over the bank counter, but to be collected by the bank of the person claiming the money and only for credit of his account at that bank. It may be drawn so as to be collected by no bank other than that of the payee in whose favour the cheque is drawn, and to be credited to no account but his. None of these safeguards is possible in using notes or coin.

A third reason for the extensive use of cheques is that payment by cheque offers much less opportunity in the payer's own office for dishonesty or careless irregularity in the handling of his cash, than does payment by other means. In the first place, the money to be paid away is not in his cashier's possession or control. In the second place, payment of an account by cheque cannot be made until it has been brought under the direct notice of the proprietor when he is asked to authorize the payment by signing the cheque. If he is careful he will not sign until the creditor's statement of account, properly checked and passed for payment, has been placed before him.

## Drawing Cheques.

When the business belongs to one person it is usual that he alone signs the business cheques. In a partnership the general rule is that any one of the partners may sign; and in doing so he signs the firm's name and not his own. On the other hand, in a joint stock company managed by directors, it is commonly required that, for the drawing of cheques, more than one person shall sign. A cheque may be drawn on a plain

sheet of notepaper ; but, for the purpose of keeping to a regular form and of helping to prevent fraud, the banks all issue their own cheque forms, and they request their customers to use these only. Every cheque drawn or paid in this country must bear a twopenny stamp.

Except when bank customers desire cheques specially printed to display their own names in the headings, the banks supply the forms free, and charge for the stamps only. They may supply specially printed forms free, if the size of the customer's account makes this concession worth while.

## Keeping Check on Cash Clerks.

Some payments, for example payments for wages, travelling expenses, postage stamps, must be made in coin or notes. Another rule, to apply then, is that the person paying the money shall not be the one whose duty it is to keep the Ledger accounts, or to write up the Wages Books, in which the payments are recorded. This rule, too, is even more applicable to the receipts side of the cash transactions, regarding which it should be arranged, if possible, that the receiver of money shall take no part in recording the receipt in the Ledger account of the customer or payer. But, in a small man's office, the staff may not be big enough for the work to be subdivided to this extent ; and then such a rule can, at the best, be only partially observed.

Against the risk of dishonesty on the part of employees entrusted with cash, it is customary to take out a policy of insurance with a fidelity guarantee office. In fairness, however, to a class of servants who, on the whole, prove worthy of their trust, it should be added that any who venture to take liberty with their employer's money are only a very few, when compared with the vast number of those who do not.

## Receipts for Payments.

Receipts should be obtained for all accounts paid, and they should be filed carefully in the manner described in Chapter III. Some business houses ask for the receipts to be given on the cheques which, when paid, are returned to the drawers by the banks. Other houses supply their own special forms of receipt ; but, for efficiency as an independent voucher of payment, the receipt is to be preferred that is given on the printed bill-head or receipt form of the creditor.

## Payment of Wages.

The small proprietor will probably pay wages himself. He knows all his workers personally, knows from his own observation if they have or have not put in a full week's time ; and he can thus be sure of the correctness of his Wages Book. It is where he does not pay himself, and where the business is too great for all employees to be known so intimately, that trouble with the wages may arise, and precaution must be taken to prevent it. Nowhere is it more needful than in dealing with wages to insist on the rule that the clerk who pays must not also keep the books. The wages sheet or book should be compiled by a person who has no access to the cash and no means of interfering with the payments. And the pay sheets should be initialed, not only by the pay clerk, but also by the compiler, or by the manager or foreman to whose department particular sheets refer.

## Wages Book.

A suitable form of Wages Book is shown at the foot of the page.

The Wages Book should be so ruled that one opening serves for five or more weeks, and dispenses with any need to re-write the workers' names during that time.

When workers' wages vary in amount from week to week, slips to show each man what he has to draw are sometimes distributed beforehand. This gives both men and employer the opportunity of having wrong amounts corrected before payment is made. The slips may be handed back in exchange for the pay envelopes.

WAGES BOOK

| No. | Name. | Rate. | Week ended _____ | | | | Week ended _____ | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Over-time. | Sum paid. | Insurances. | | Over-time. | Sum paid. | Insurances. | |
| | | | | | De-ducted. | Em-ployer. | | | De-ducted. | Em-ployer. |
| | | | | | | | | | | |

## Check on Wages.

At the pay window the workers file past in a certain order, and the foreman may be present to identify each person. But undivided control of wages should not be allowed to rest in foremen's hands any more than in those of pay clerks. Many have yielded to the temptation to send in dummy names for the wages list, and to put up men to draw sums that have never been earned.

Where wages are computed on the hours worked, a time-recording clock should be used; and the cards stamped morning, mid-day, and evening by the clock should be the basis on which the calculations are made. Some firms complete the whole of the wages calculations first and then draw from the bank the exact amount required. Others draw the wages cheque for an approximate round sum, and the excess or deficiency of the sum drawn goes each week into or out of the office cash.

## Petty Cash.

Money should never be paid away, whether from petty cash or ordinary cash, except in exchange for a document—a receipted bill, an I O U, or some other memorandum—that represents the payment. For petty cash it is customary to have a printed pay-out form. This form is used when a bill or receipt cannot be obtained, or is not available at the time. The slip or the receipt must be signed or initialed by a person who has authority to sanction the making of the payment. The keeper of the petty cash should

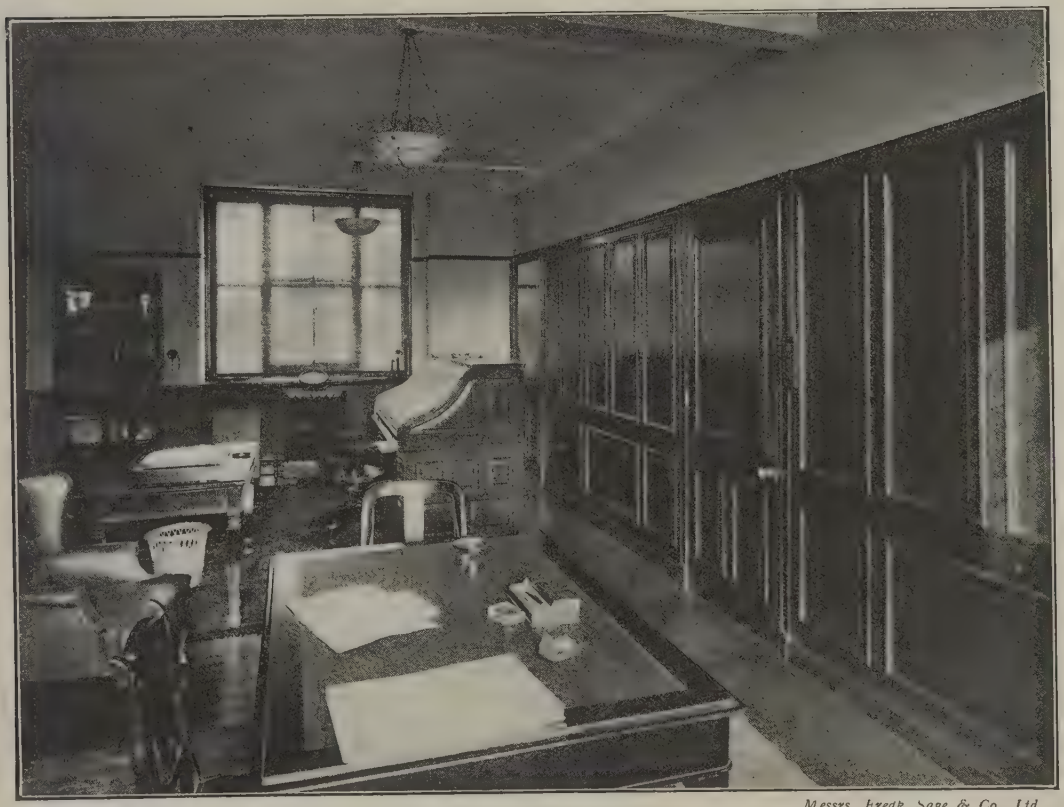


*Photo lent by* *Messrs. Freak. Sage & Co., Ltd.*

A Well-Fitted Board Room

PETTY CASH

Date_____19__

PAY to_____

for_____

_____

(Signed)

_____

£ : :

PETTY CASH BOOK

| Received. | | | Date. | Particulars. | Paid. | | | Postages. | | | Carriage. | | | Travelling. | | | Sundry Expenses. | | | Accounts. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | Fol. | Amount. | | |
| £ | s. | d. | 1923. | | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | £ | s. | d. | | £ | s. | d. |
| 25 | – | – | Feb. 1 | Received— | | | | | | | | | | | | | | | | | | | |
| | | | „ „ | Carriage (1/11, 2/9, 5/4, 7d.) | | 10 | 7 | | | | | 10 | 7 | | | | | | | | | | |
| | | | „ „ | Stamps (20/–, 10/6) | 1 | 10 | 6 | 1 | 10 | 6 | | | | | | | | | | | | | |
| | | | „ „ | Travelling . . | 2 | 17 | 1 | | | | | | | 2 | 17 | 1 | | | | | | | |
| | | | „ „ | Cleaning (8d, 2/3) . | | 2 | 11 | | | | | | | | | | | 2 | 11 | | | | |
| | | | „ 2 | Repairs (Bell & Co.) | | 16 | 4 | | | | | | | | | | | | | 112 | | 16 | 4 |
| | | | „ „ | Carriage (1/5, 3/2) | | 4 | 7 | | | | | 4 | 7 | | | | | | | | | | |
| | | | | | 19 | 15 | 4 | | | | | | | | | | | | | | | | |
| | | | „ 6 | Balance down . | 5 | 4 | 8 | | | | | | | | | | | | | | | | |
| 25 | – | – | | | 25 | – | – | | | | | | | | | | | | | | | | |
| 5 | 4 | 8 | Feb. 8 | Balance | | | | | | | | | | | | | | | | | | | |
| 19 | 15 | 4 | „ „ | Received | | | | | | | | | | | | | | | | | | | |

insist on getting a slip or other receipt for every sum he gives out. He can then place the slips in his cash box, and enter them up in the Petty Cash Book at the end of the day, feeling sure that he is not omitting to enter any payment he has made.

## "Imprest" Method.

The best way to keep petty cash is by what is known as the "imprest" method. A lump sum is given to the petty cash keeper to start with, the amount varying in different offices according to the demands that are likely to be made upon it. At the end of each week the petty cash keeper presents to the cashier the Petty Cash Book properly written up and accompanied by the slips and receipts, all fastened together in order, for the payments of the week. After having satisfied himself of the correctness of the entries and of the vouchers submitted, the cashier refunds to the petty cash clerk the exact total of the sums paid out. In this way, week by week, he restores the petty cash fund to its original amount.

## Ruling of Petty Cash Book.

A Petty Cash Book should be ruled in some such form as that shown above. The headings of the dissection columns correspond to names of expense accounts in the Nominal Ledger. Each refund made by the cashier is, of course, entered in the ordinary Cash Book. The debits to the expense accounts can be made from this weekly credit entry in the Cash Book in the manner shown on page 400. As an alternative the nominal postings may be made monthly from totals of the dissection columns in the Petty Cash Book itself.

It is customary to have the detailed record of letters posted and postage stamps used in a separate Post Book kept by the imprest method, too.

# CHAPTER VI

# BANKING AND KINDRED MATTERS

No business, except the very smallest, can afford to carry on without a banking account. Some of the reasons for this have been given already. It has been seen that the bank is the safest place in which to keep the business funds; also that cheques drawn on the bank and paid direct to creditors are the most convenient means of making business payments. Further, a bank account is necessary to a business man so that he can avail himself of the bank's services for the collecting of the cheques he receives. These are the chief facilities for the benefit of which a bank account is kept; but others, for example obtaining an overdraft or discounting bills of exchange, will be mentioned soon.

## Opening a Bank Account.

A banker, quite as much as a trader, requires references before he opens an account with a stranger. This precaution is necessary as a protection of the commercial community, and to keep the banker's own business from falling into disrepute. Were he to issue a cheque book to any and every applicant, it would be much easier than it is now for a dishonest person to open a bank account with a small sum, issue cheques to business people after that sum had been exhausted, and then disappear. This happens in many individual instances now; but, in any locality, the number is a very small part of the cheque transactions as a whole. So small a part is it that business men often deliver goods to what appears to be the permanent address of a stranger, before the cheque he gives in payment has been cleared through the bank.

## Particulars Furnished to Banker.

In opening a new account the banker takes careful note of the applicant's full name and address, and particulars of the nature of his business or occupation. The banker also takes a specimen of the new customer's signature, and keeps this for reference and comparison in case of doubt. The signature given should, of course, be the same in form as that the customer intends to use in signing cheques and other orders given by him to the bank in connection with the account.

## Partnerships.

Should the new account be opened by a partnership firm, the bank will require the name and address of each partner and a specimen of the firm's signature written by each partner.

## Registered Companies.

From a company registered under the Companies Acts the banker wants something more, even when the company is but a small one. Such a company is a body created by legal process for special objects only, and with only the particular powers granted to it. The banker needs to be acquainted with the company's objects, and to be satisfied that any dealings the company may have with him—borrowing money, for example—are covered by the powers it has acquired. He asks, therefore, for a copy of the company's Memorandum and Articles of Association—documents that must be filed with and approved by the Registrar of Companies before a company can be incorporated. To be sure, also, that the company has actually been incorporated and is entitled to commence business, he desires to see the certificate or certificates to that effect issued by the Registrar. Lastly, he requires a signed copy of the directors' resolution authorizing the opening of the account with him, the name of each director or other officer empowered to sign cheques and the like on the company's behalf, and a specimen signature of each.

## Bank Interest.

In London and the South the banks do not allow interest on money left with them on Current Account; but, provided the customer keeps a certain balance to his credit, neither do they make any charge for paying the cheques that the customer draws. In the North of England, on the other hand, interest at a low rate is allowed every half-year on the credit balance of a Current Account, and a small commission is charged for paying the customers' cheques. The commission on a small account may be charged at 5s. per cent of the cheques paid. On a bigger account it would be less; and, if the account is a good one, the bank will agree to work it for a fixed yearly sum.

## The Current Account.

The *Current* Account is the one a business man must have, it being an account into which money may be paid, or out of which money may be drawn at any time.

For a Current Account the banker issues a "pass book," which he asks shall be left with the bank at frequent intervals, and in which he writes up for the customer's use a copy of the account.

When money is paid into Current Account a paying-in slip must be filled up; for taking money out a cheque must be drawn. If a new cheque book is required, the bank's printed order form must be signed; if a bill is to be collected, or an acceptance is to be paid, again the slip for the purpose must be used. And, for every monetary transaction that the customer requires the bank to carry through, a slip or a signed letter of authority must be given by him.

## Deposit Account.

If the business man has funds that he will not need for several months, he should place them on *deposit* with the bank. The joint-stock banks allow interest on deposits at a published rate; and, even where interest is given on the credit balances of Current Accounts, the rate for Deposit Accounts is a little higher. For money left with him on deposit the banker gives a deposit receipt. Withdrawal is subject to notice—seven days' or more, as stated on the receipt—and the receipt must be surrendered when repayment is obtained.

## Cheques and the Cheque System.

A bank cheque is one of the commonest of business documents, yet several points about cheques are not generally understood, and may profitably be dealt with here. These are matters a clear knowledge of which it is decidedly useful for business people to possess. (*See also* section on "BANKING.")

## Signatures on Cheques.

The drawer of a cheque signs it, of course. If he is a single trader he signs his own name or, perhaps, the name he is trading under. If the drawer draws the cheque as a partner he signs, as a rule, the name of his firm and nothing more. Each member of a partnership is liable to a creditor of the firm for the whole of that creditor's claim until the claim is paid; but the position of the directors of a company is different. They are not themselves liable except for acts they may do irregularly. In signing cheques for their company they intend that the company only shall be liable to pay, and they sign differently from partners. The usual form for drawing a company's cheque is—

For and on behalf of THE _____ Co., LTD.

_____*Director.*

_____*Secretary.*

In regard, however, to the number of officers signing, the form is varied by the regulations that the Board of Directors make or the Articles of the company contain. For endorsement the signature of one officer is usually enough, thus—

For the _____ Co., Ltd.
_____ *Secretary.*

## Signing in Representative Capacity.

In connection with companies' signatures on cheques and bills it is important to note that, unless the officer signing indicates clearly that he signs for the company and not for himself, he will be personally liable for the amount, should his company fail to pay. The name of the company, too, should be given in the signature in full, including the word "limited" where, as is usual, that word is part of the company's name.

When a person other than director or secretary is authorized to sign for a company, or when a servant or agent is authorized to sign for a single trader or a partnership, the procuration form of signature is required by the bank. Example—

*per pro.* Brown & Robinson,
Edwin Jones.

## Drawer, Drawee, Payee.

The "drawer" of a cheque is the party by or for whom the cheque is signed when it is first made. He is the person on whose bank account the cheque is drawn. The banker to whom the cheque is addressed is known as the "drawee," and the party to whom the cheque is made payable in the first instance is the "payee." In the example hereunder Anderson & Brown are the drawers, whilst Rutherford & White are the payees—

X
Y 503472 London.
1*st March*, 1923.

**LLOYDS BANK LIMITED,**
**Finsbury Hill, E.C.2**

Pay Messrs. Rutherford & White—or order
One hundred and twenty pounds four shillings.

T £120 : 4 : 0

2*d.* Stamp.

Anderson & Brown.

## "Order" and "Bearer" Cheques.

The above is the form of an "order" cheque; but, if the example read, "Pay ——— or bearer," it would be termed a "bearer" cheque. The difference between an order and a bearer cheque is that the order cheque must be endorsed by the payee, should he pass the cheque on to anyone else; whilst the bearer one may be passed on without endorsement.

## Negotiable Instruments.

Cheques belong to a class of documents known in law as "negotiable instruments." A negotiable instrument is a document that gives the holder a right to a sum of money, or gives him some right expressed in terms of money. Also, a negotiable instrument brings a good title to a holder who takes it in good faith and for value, notwithstanding any defect short of forgery in the title of the person he takes it from; and it carries similarly a good title to a person to whom the holder passes it on.

It should be noted that a good title to an article of merchandise cannot, as a rule, be obtained from a person whose title is defective. If a watch or a bicycle had been stolen, a man who afterwards acquired it would not usually have the right to retain it against the true owner, even though he acquired it honestly and paid fair value for it. His remedy would be against the person from whom he got it. On the contrary, if he honestly acquired a Treasury note and gave value in exchange for it, he could hold the note against any claimant. Money would in a large degree fall short of serving its purpose were it necessary for the receiver to conduct a search into the history of each note or coin before he could feel safe in taking it.

## Bills of Exchange and Notes.

A cheque is one form of bill of exchange; but cheques are not usually called by that name, and there are other forms. These differ from cheques in not being drawn on banks, or in being payable at future dates whether drawn on banks or not; whereas the cheque is always drawn on a bank and is always payable on demand. These other bills of exchange are negotiable instruments, too; and they may, like cheques, be either of the order or the bearer kind. To the class of negotiable instruments also belong promissory notes and bank-notes.

## Negotiation.

A bearer cheque or bill or note is negotiated merely by delivery from one person to another. An order cheque or bill or note is negotiated by endorsement and delivery. Of the bearer variety of negotiable instrument the Bank of England and Treasury notes are the commonest examples. A business man who takes a Bank of England note in good faith and for value, without knowledge of any defect in the title of the giver, need not worry about its past history. He can keep it even though he should afterwards learn that it had been stolen. And if he takes, in such circumstances, an order cheque in the same form as the example shown above, he can retain that also, unless the endorsement necessary to negotiation has been forged. A good title can never be given or acquired through forgery.

## The Banker and Endorsements.

It is a duty of the paying banker to see that endorsements on cheques drawn by his customers are made in correct form. A banker cannot, however, be expected to know the signatures of all the persons who may become endorsers of the cheques his customers draw. The banker, therefore, is not held liable for forgery in an endorsement of a cheque, so long as the endorsement is regular in form and the cheque is paid by him honestly and in the ordinary course of business.

## Forgery in Drawing Cheques.

That applies, however, only to endorsement. In regard to the drawing of a cheque the banker's position is very different. Should he pay a cheque on which the drawer's signature is a forgery, the banker cannot charge the cheque to the account of the customer whose signature has been counterfeited. That customer has not, in fact, given the banker any authority to pay the money. No matter how cleverly the forgery has been executed the banker must bear the loss, unless he can show that the customer's own laxity has helped to bring the forgery about.

The same rule applies to forgery in the form of a material alteration of a genuine cheque. Should a banker pay on an unauthorized alteration, whereby the amount of the cheque is raised, say, from eight pounds to eighty, the loss, again, must usually be his own. Still, by drawing their cheques carefully, his customers should help him to escape such losses ; and it is common now for drawers to use a machine for writing in the amounts of cheques in such a way that alteration is impossible without immediate detection.

## Refusing Payment.

After issuing a cheque the drawer may stop its payment by sending his banker a signed instruction not to pay. On presentation of the cheque the banker will refuse payment, and will return the cheque marked "payment stopped." In such circumstances the payee has no claim against the bank and can look to the drawer only for redress.

When it happens that a cheque is dishonoured because there is not sufficient in the drawer's account to meet it, the banker before returning the cheque marks it "R/D," by which he means "refer to drawer."

## Endorsement.

Endorsement is something written on the back of a cheque or other bill. A cheque is an order addressed to a bank and requiring the bank to pay a certain sum of money to another person. The order cheque is one that names the payee, and requires the money to be paid to him or to anyone else to whom he, in his turn, orders payment to be made. This further order of the payee, if given at all, is given by endorsement of the cheque, and the payee is then known as the "endorser."

On a cheque, endorsement seldom consists of more than the endorser's signature. This is called a "blank endorsement," because the order, all except the signature, is left blank to be completed, if thought necessary, by a future holder of the cheque. The full endorsement should be something like the following—

*Pay Joshua Hill & Sons or order,*
*Rutherford & White.*

That is termed a "special endorsement," and on bills of exchange other than cheques special endorsement is the rule. Joshua Hill & Sons, in the above, are known as the "endorsees."

## Subsequent Endorsements.

In cheques and bills of all kinds the first endorsee may endorse to a second, the second to a third ; and in this way bills of exchange frequently pass through many hands. Blank endorsement causes an order cheque to become a bearer one ; and it continues to be payable to bearer until the blank endorsement is altered to a special one by a subsequent holder, or until a further endorsement in special form is added. If, however, a bill is originally drawn payable to bearer, special endorsement will not make it payable to order.

Bearer cheques, it has been stated, may pass from person to person without endorsement. Still, that does not prevent their being endorsed, if endorsement is desired ; nor would the endorsement, when made, be of no effect.

## Liability of Endorsers.

Any person who has endorsed a cheque may be called upon to pay it should the drawer's bank refuse to pay when the cheque is presented to it. A person who had passed on the cheque without endorsing it might, on the other hand, not be liable at all. The endorsement of the giver puts beyond dispute the fact that he was a party to the cheque and is liable upon it. And business men, when asked to take a bearer cheque from a person other than the drawer, should always require the giver to endorse. They should also make sure of his address, as well as his name, so that they may be able to maintain a claim against him, if the cheque comes back dishonoured by the drawer's bank.

## Correct Endorsements.

The signature in the first endorsement of an order bill or cheque must correspond with the payee's name as given on the face of the document. If the endorsement is a special one, and a second endorsement follows, the signature in the second endorsement must correspond with the name of

the endorsee given in the first. For example, "Henry T. Smith" would not be a good endorsement, if the payee's or endorsee's name were given as "Henry Smith." Nor would endorsement on behalf of "Henry Smith & Co., Ltd." be good if the cheque were payable to "Henry Smith & Co." In cases of this kind, where the payee is incorrectly named, his best course is first to endorse in the way he has been named and then to add his correct signature.

Example (1):

*Henry Smith,*
*Henry T. Smith.*

Example (2):

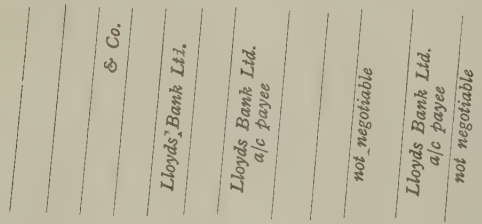
*Henry Smith & Co.*
*For Henry Smith & Co., Ltd.,*
*Geo. H. Smith, Director.*

A cheque made payable to "Henry Smith" may, however, be endorsed "H. Smith" only; or, conversely, one payable to "H. Smith" may be endorsed "Henry Smith."

"Captain Hy. Smith" or "Mrs. Hilda Smith" are not, in this country, considered to be signatures. In their signatures the title should be dropped, or added at the end by way of description of the signers, as in "Henry Smith, Capt., R.N." A cheque made payable to "Mrs. Henry Smith" may be endorsed "Hilda Smith, wife of Henry Smith."

## Crossings.

What is known as a crossing is peculiar to cheques, and to a few other documents such as postal orders. If a crossing has been added to some bill of exchange that is not a cheque, the crossing has no effect. A crossing consists of the name of a bank written transversely on the face of the cheque; or it consists merely of two lines drawn across the face. The following are examples—




No. 1 No. 2 No. 3 No. 4 No. 5 No. 6

A crossing of any kind is an instruction to the drawee or paying banker that he is not to pay the cheque over his counter; but that he is to give payment only to a collecting banker who, in his turn, credits the account of the payee or other holder of the cheque. It happens sometimes that the paying bank is also the collecting bank; and then all that takes place is the debiting of the drawer's account and the crediting at the same bank of the account of the payee, endorsee, or other holder. Should the crossing be in the form of the specimen No. 4 or 6, credit cannot be given by the collecting bank in any account other than the payee's.

Nos. 3, 4, and 6, in which the collecting bank is named, are called "special crossings."

Nos. 1, 2, and 5, where a blank is left for the name of the bank to be filled in later, are called "general crossings." The general crossing would be used by the drawer of a cheque when he did not know who his payee's bankers were.

A cheque may be crossed by the drawer, or by any holder, or by the collecting bank itself; and a general crossing may be turned into a special one by the payee or any subsequent holder of the cheque.

## "Not Negotiable."

In Nos. 5 and 6 the words "not negotiable" have a further effect on the cheque. These words may be included in either a general or a special crossing; but, except as an addition to a crossing, they have no effect at all. As part of a crossing their effect is to take away from the cheque the quality of negotiability explained above. A cheque so crossed ceases to be a negotiable instrument, with the result that, in passing from one person to another, it is like the watch or bicycle. Should the payee or any later holder pass such a cheque on, the person to whom he passes it takes it subject to any defect of previous title. If the cheque has been stolen previously to its coming to him he cannot retain it against the true owner.

## Advantages of Crossings.

Crossings are resorted to for making cheques safer instruments of remittance than they would be uncrossed, or "open" as they are then called. The crossing makes more certain that payment reaches the person whom the drawer wishes it to reach. A special crossing is more efficient than a general one in causing payment to reach the account intended, and a "not negotiable" crossing with "account payee" added is the most efficient of all. A cheque drawn thus is a modern and highly developed form of the simple and ancient bill of exchange, which was freely negotiable, and which was drawn on one merchant by another for the value of goods that had passed or were passing between them.

## The Clearing of Cheques.

The simplest case of clearing payment of a cheque has already been mentioned, namely, that where the drawer and the payee keep their banking accounts at the same bank. It was seen that, in such a case, payment is effected merely by two entries in the bank's Ledgers—one entry debiting

the amount of the cheque to the drawer's account, the other crediting the amount to the account of the payee. That payment has in this way actually passed from the one person to the other becomes clear when we consider that the payee's claim on the bank is now more than it was before, whilst the drawer's claim on the bank is now less. If the accounts are at different banks in the same town the collecting bank credits the payee and debits its account with the paying bank, to whom it hands the cheque. The paying bank credits the collecting bank's account and debits its customer, the drawer. But, in the larger provincial cities, local clearing houses have been established to simplify the procedure.

If the collecting and paying banks are in different towns in England, payment is usually made through London. When the provincial collecting and paying banks are branches of the same banking company, payment is made through their head office in London. As before, the whole process is carried out merely by book entries. It will be understood, however, that these book entries are not made for single cheques, but for the totals of the batches that are posted daily from the collecting branches to Head Office, and from Head Office to the paying branches of the bank.

## Bankers' Clearing House.

When collecting and paying offices are branches of different banking companies in England, payment is effected through the Bankers' Clearing House in London. The head offices in London of the large banking companies are all members of the Clearing House. Every day each head office receives large numbers of cheques from its branches. These it sorts out according to the banks on whose branches the cheques are drawn. The cheques it has received drawn on other members it exchanges at the Clearing House each day for those the other members have received drawn on itself or its branches. The balances that, on these exchanges, a member has to receive from or pay

*By permission* *"The Draper and Drapery Times."*

A Section of the Ribbon Department
At the Warehouse of Messrs. John Howell & Co., Ltd.

to the other members are all thrown together, and a single final balance to be received or to be paid by each member is ascertained. All members keep accounts at the Bank of England, and the sum a member has to receive or to pay on any clearing is received or paid by a single transfer, in the Bank of England books, between the account of that member and the clearing account. Here, again, payment is received or given by book entries merely, and even the book entries are reduced to the lowest possible number.

In this we find the last reason why cheques are so widely used for business payments, namely, that the cheque system is the most economical means of remittance the business community has been able to devise.

## The Three London Clearings.

In London there are three clearings of cheques each day. They are the Town clearing for cheques drawn on banks in the centre of London, the Metropolitan clearing for London banks outside the Town area, and the Country clearing for provincial banks. It is these that are indicated by the capital letters T, M, and C, one of which is printed close to the space where the amount appears in figures on every English cheque.

## Bills of Exchange.

Bills of exchange are usually divided into the two classes of inland bills and foreign bills. An inland bill of exchange is one drawn and payable in this country. A foreign bill is one drawn abroad and payable here, or drawn here and payable abroad, or both drawn and payable abroad but negotiated here in the meantime.

## Inland Bill.

The form of an inland bill was given on page 396. As explained on that page, the chief uses of the inland bill are to get from a debtor a legal admission of the debt and of the exact sum due, also to fix a day for payment of the debt. A secondary purpose is to put the debt into such a form that the creditor who is short of funds may be able to raise money on the bill. Banks do a large business in advancing the values of bills of exchange before the bills are due for payment. For this purpose, if the bill is an inland one, the drawee's acceptance should be obtained before the bank is approached. As the bill is not yet due, the banker advances its *present* value only. He deducts from the face value interest for the time the bill has to run till payment; and for that reason the bill is then said to be "discounted." The banker becomes the owner of the bills he discounts, and he collects payment from the acceptors as the bills fall due.

## Dishonour of Bill.

Should a bill be dishonoured when presented to the drawee either for acceptance or for payment, the holder has a right of immediate recourse to any of the persons who were parties to the bill before he took it. It follows that the more endorsements a bill contains, the more chances there are of obtaining payment should the drawee fail to meet it.

## Days of Grace.

In this country, on all bills, except those payable on demand or at sight, three "days of grace" are added to the time the bill has to run to maturity. Thus a bill, drawn payable at thirty days' sight and accepted on 1st April, would become due for payment on 4th May. Should the last day of grace be a Sunday, Christmas Day, or Good Friday, the bill falls due on the preceding business day. When the last day of grace is a bank holiday, or a Sunday preceded by a bank holiday, the bill is due on the succeeding business day.

## Acceptance of Inland Bill.

Acceptance of an inland bill is usually obtained by the drawer direct from the drawee through the post. For collecting payment, however, the services of the banks are used, even when the bill has not been discounted by the bank. Many bills are accepted payable at the acceptor's bank; but, when that is not the case, the bank entrusted with collection presents the bill at the acceptor's own address, as shown on the bill.

## Stamp Duties.

Bills of exchange payable on demand or at sight, or within three days of date or of sight, require a twopenny revenue stamp. All other bills and all promissory notes are stamped according to the following scale, unless they are drawn and payable abroad—

| | s. | d. |
|---|---|---|
| Where the amount does not exceed £10, stamp | | 2 |
| " it exceeds £10 but not £25, . " | | 3 |
| " " £25 " £50, . " | | 6 |
| " " £50 " £75, . " | | 9 |
| " " £75 " £100, . " | 1 | – |
| For every additional £100 or part of £100 . . | 1 | – |

Every bill drawn in this country must be stamped before it is completed and, unless it is a demand bill, the stamp must be an impressed one. For bills drawn abroad an adhesive stamp is affixed here when the bill arrives; and for those both drawn and payable abroad the rate of stamp duty imposed here is—

Up to £25, stamp as above.
Exceeding £25, but not £100, stamp 6d.
For every additional £100 or part of £100, 6d.

## Foreign Bills.

In foreign trade it is quite usual for the exporter to draw, at the time of shipment, a bill on his customer abroad for the value of the goods and charges. Foreign bills are drawn, as a rule, in

sets of two or three, and usually in the currency of the drawee's country. The first of a set is sent abroad by one mail, the second by the next, so that, should one be lost, the other is likely to arrive. When one of the set has been paid the other or others are void. The following is a specimen of a foreign bill—

FOREIGN BILL—FIRST OF EXCHANGE

*No.* 12678. *Mersey House,*
*Exchange for* $2,533\frac{35}{100}$ *Liverpool.*
20 *Feb.*, 192 .

6/-

*At thirty days after sight of this First of Exchange (Second of same date and tenor being unpaid) pay to Messrs. Waskington & Hobson or their order the sum of Two thousand five hundred and thirty-three dollars, twenty-five cents for four cases of goods shipped by S.S. "Philadelphia" as advised.*

*Simpson & Holt.*

*The Walter P. Hill Co.*
*East 29th Street, New York.*

FOREIGN BILL—SECOND OF EXCHANGE

*No.* 12678. *Mersey House,*
*Exchange for* $2,533\frac{35}{100}$ *Liverpool.*
20 *Feb.*, 1923.

*A thirty days after sight of this Second of Exchange (First of same date and tenor being unpaid) pay to Messrs. Washington & Hobson or their order the sum of Two thousand five hundred and thirty-three dollars twenty-five cents for four cases of goods shipped by S.S. "Philadelphia" as advised.*

*Simpson & Holt.*

*The Walter P. Hill Co.,*
*East 29th Street, New York.*

## Collection of Foreign Bills.

The drawer of a foreign bill makes use of the bank either to collect the money for him when payment is due, or to make him an advance on the bill at the time of shipment. But, with foreign bills, owing to the difficulties of distance, the banks are entrusted with obtaining acceptance as well. It is very often with the London office of a bank of the foreign country that the British exporter deals. If he asks the bank to collect the money for him, the bank sends the first of exchange to its office in the drawee's town abroad. The second of exchange follows in due course. That office gets the drawee's acceptance, holds the accepted bill until maturity, collects payment on the due date, and advises its London office that payment has been obtained. The London office then credits the drawer's account.

Should the exporter be unwilling to trust his customer for the amount, he attaches to the bill of exchange the shipping company's bills of lading, and he tells the bank that the bills of lading are not to be surrendered to the drawee until payment (or, perhaps, acceptance) has been given. At the foreign port possession of the goods cannot be obtained until one of the bills of lading has been given up to the agents of the shipping company; and, in the meantime, the goods lie in a warehouse at the docks. So long then as the bank holds the bills of lading it keeps control of the consignment in the interest of the exporter for whom it acts.

## Advances on Foreign Bills.

If the exporter desires an immediate advance from the bank in this country, he attaches to his bill of exchange the bill of lading, an insurance policy to cover risk of loss at sea, and a copy of the invoice for the goods. On security of the bill of lading and the insurance policy the bank here will usually advance to the exporter at once the whole or a large part of the value of the bill. This gives to a shipper with small capital the funds wherewith to carry through another shipment without his needing to wait until payment for the previous shipment is received. In such cases the banks, in fact, finance the shipment of the goods.

## Bankers' Loans and Overdrafts.

Another way in which the banks help trade by finding the working capital necessary for trading is in granting overdrafts and loans. An *overdraft* occurs when the bank allows a customer to draw cheques on his Current Account after the balance to his credit has been exhausted. The overdraft is obtained by arrangement with the bank, and a limit to the overdraft would usually be fixed when the arrangement was made. The amount overdrawn will vary from time to time according to the customer's needs, and it is only on this varying balance or sum actually used that the banker charges interest.

In a *loan*, on the other hand, the banker advances all the agreed amount at once, debiting the full amount to a Loan Account in the customer's name, and crediting it to the customer's Current Account so that he can draw cheques against it. The debit to Loan Account remains the same until the whole or part of the loan is repaid, and it is on the full debit to Loan Account that interest is charged. The rate of interest required on the fixed loan is, however, likely to be lower than that charged on the fluctuating overdraft.

## Security for Loans.

Unless the banker is thoroughly satisfied about the financial soundness of his customer, he will require security in some form for the repayment of the loan or overdraft.

Security that is acceptable to a banker takes various forms. Mortgages of property may be taken; but bankers prefer a security they can realize more quickly, should the necessity to sell arise. Such are stocks and shares readily marketable on the Stock Exchange, or the written guarantee of some person or persons whom the banker believes will be able to pay; or, sometimes, policies of life assurance whose surrender values cover the amount of the advance. When an overdraft is granted without security the banker

asks to be supplied periodically with a copy of the customer's balance sheet.

## The Business of a Banker.

Just as the business of a trader consists of buying goods at one price and selling them at a higher price, so the business of a banker consists of getting the use of money at one rate, and selling the use of the same money at a higher rate. In each case the profits of the business arise in the difference between the selling and the buying price. The banker, however, has an advantage over the trader in regard to the funds that they use for carrying their businesses on. The goods a trader sells are his own goods, bought out of his own capital, whilst the funds a banker lends are not his own capital, but other people's money. The money he advances at a profit to some of his customers is money that has been left with him by others of his customers at a lower rate of interest, or at no interest at all. His function in the business world is to act as a medium between those members of the community who have funds temporarily to spare and other members who can for a time use these funds to earn profit greater than the interest that the banker charges for his service. (*See also* section on "BANKING.")

CHAPTER VII

# THE BUSINESS ACCOUNTS

THE several purposes for which a business man keeps accounts may be stated thus—

1. To show at any time—
   (*a*) What is owing by any debtor;
   (*b*) What is owing to any creditor;
   (*c*) What cash is available in the office or at the bank.
2. To show periodically—
   (*a*) The turnover of the business, of what classes of goods it is made up, and the gross profit earned upon it;
   (*b*) The expenses incurred, in total and under various heads; also the net profit realized, or the loss sustained;
   (*c*) The exact position of the business, set down as a statement of liabilities and assets at a given date.

In this section of BUSINESS BUILDING nothing more than has already been written need be said about the first set of objects, the keeping of debtors' and creditors' accounts, and the accounts for cash and the bank. Of the second set of objects named, turnover, expenses and profits will be dealt with soon.

## The Balance Sheet.

That leaves for consideration now the periodical statement of liabilities and assets. In double-entry book-keeping this statement takes the form of a balance sheet. A simple specimen is shown below.

A balance sheet is a summary of the accounts open in the Ledgers on the day for which the balance sheet is compiled. It shows on the Liabilities side all that is owing by the business, to outside creditors first, and next to the proprietors themselves. On the Assets side it shows under various heads all resources that the business possesses which can be used to pay liabilities off. Whatever sums the proprietors have invested in the business are included on the Liabilities side under the head of Capital. It will be understood, however, that outside creditors have first claim on the business assets. Proprietors' capital,

BALANCE SHEET AT 31ST MARCH, 1923
OF ANDERSON & BROWN

| LIABILITIES. | £ s. d. | £ | s. | d. |
|---|---|---|---|---|
| Bills Payable | | 2,996 | 5 | 6 |
| Sundry Creditors | | 15,813 | 2 | 9 |
| Capital: | | | | |
| *W. Anderson*— | | | | |
| At 1st April, 1922 | 16,234 12 2 | | | |
| *Add* ½ Profit | 1,621 10 6 | | | |
| | 17,856 2 8 | | | |
| *Less* Drawings | 1,220 – – | | | |
| | | 16,636 | 2 | 8 |
| *P. Brown*— | | | | |
| At 1st April, 1922 | 15,167 14 9 | | | |
| *Add* ½ Profit | 1,621 10 6 | | | |
| | 16,789 5 3 | | | |
| *Less* Drawings | 1,100 – – | | | |
| | | 15,689 | 5 | 3 |
| | | £ 51,134 | 16 | 2 |

| ASSETS. | £ | s. | d. |
|---|---|---|---|
| Cash | 118 | 4 | 6 |
| Bank | 3,006 | 11 | 4 |
| Bills Receivable | 4,757 | – | – |
| Sundry Debtors | 21,938 | 5 | 6 |
| Stocks of Goods, Stationery, etc. | 18,563 | 4 | 8 |
| Furniture and Fixtures | 2,751 | 10 | 2 |
| | £ 51,134 | 16 | 2 |

therefore, is represented at any time by the excess of assets over liabilities to outside creditors.

The Liabilities side comprises all the accounts with credit balances, and the Assets side all those in which the balances are debits. In a solvent business the total assets and the total liabilities made up in this way must always be equal; and double-entry accounts are kept according to certain principles by which the equality of assets and liabilities—that is, of debits and credits—is always maintained. These principles we shall now examine.

## The Theory of Debit and Credit.

A balance sheet represents the position of a business at a given moment. The first transaction that takes place after that point in time alters the position which the balance sheet shows. Let us take the balance sheet given above, and suppose that Jones & Co. pay a sum of £10 they owed to Anderson & Brown. It is plain that the Sundry Debtors, in which Jones & Co.'s account is included, are now £10 less than before, and that the business cash is £10 more. First, then, this transaction has had two effects on the position of the business as set down in the balance sheet—one effect on the cash, the other on the book debts. Secondly, each of the effects is of the same monetary extent as the other, namely, £10. Thirdly, each effect is of a kind opposite to the other—the first being an *increase* of one asset, cash; the other a *decrease* of another asset, book debts. To keep a full account of the transaction both of its effects must be recorded, and recorded on opposite sides of different accounts.

For the recording of opposite effects all Ledger accounts have two sides—the left-hand or debit side, and the right-hand or credit side. In recording the transaction we are now examining, Cash Account would be debited with the increase that takes place in the cash, and Jones & Co.'s account would be credited with the decrease in the book debts. It is because of this necessity for making a double record of the two-fold effect of every transaction that book-keeping gets its name of "double-entry."

## Effects of a Credit Sale.

Suppose now a sale of £20 worth of goods is made on credit to Smith & Brown, there will be two effects on the Assets side of the balance sheet, again. Each effect, also, will be of opposite kind. The asset book debts will be increased and Smith & Brown's account debited with the increase, whilst the asset stock of goods will be decreased and Sales Account (representing goods) credited with the decrease. Were the goods sold at cost price it would be plain, too, that the effects were actually of the same extent. When the sale is made at a profit the results on the position of the business are not so simple or so clear. Yet, the two kinds of result are still of equal extent, as we shall presently see.

## Effects of a Credit Purchase.

In the preceding examples both effects take place amongst the assets of the business. As an example of a different kind let us take, next, a purchase of goods on credit. The effects would be an increase of stock and a corresponding increase in creditors' accounts. This time the effects are both described as increases; but they are increases in things that are themselves of opposite nature—one being an increase in a liability, the other an increase in an asset—and they are recorded on opposite sides of the accounts. Every liability has, in time, to be paid out of assets; so that the effects in this example may be stated as: (1) a present *increase* in the asset stock, accompanied by (2) a present *increase* in the liability creditors' accounts, the payment of which will ultimately result in a *decrease* of the asset cash at bank. The present increase in assets is *debited* to Purchases Account, and the present increase in liabilities is *credited* to the supplier of the goods.

## Always Two Opposite Effects to Record.

It begins to be clear that *every* transaction has two effects of equal extent, but in opposite directions, on the business within which the transaction takes place. It becomes clear, too, that a full record of these effects on the business requires two entries (or, in some instances, two groups of entries) to be made in the Ledger accounts, the entries (or the groups) to be of the same amount, but to be made in opposite ways. One of the effects is always debited to one account, and the opposite effect is always credited to another account. A few further examples will help to give us confidence in the rule—

(1) When payment is made for a credit purchase the creditor's account is debited with the resulting decrease in liabilities, and Bank Account is credited with the decrease in the asset bank funds.

(2) If a customer gives a bill of exchange for the account he owes, Bills Receivable Account must be debited with the increase made in the asset bills in hand, and the customer's account must be credited with the decrease that results in the other asset book debts.

(3) Should a payment be made for new fixtures, Fixtures Account would be debited with the increase in that asset, and Bank Account would be credited with the decrease in the asset, money at the bank.

(4) A return of goods from a customer brings about an increase in the asset stock, debited to Sales Account, accompanied by a decrease of the asset book debts, credited to the customer's account.

(5) A return of goods to a creditor means a decrease in liabilities, which is debited to the

creditor concerned, and a decrease in the asset goods which is credited to Purchases Account.

(6) Were more money brought into the business by a partner, Bank Account would be debited for the increase of assets at the bank, and the partner's Capital Account would be credited for the increase in the liability of the business to him.

No matter what transaction we take, we shall find that it invariably results in a two-fold change in the position of the business, and that it requires a double entry in the books, if a complete record of the change is to be made. Finally, as assets are always represented in the accounts by debit balances, it follows that *an increase in an asset requires a debit entry and a decrease needs a credit.* As liabilities are represented by accounts with credit balances, *an increase in a liability must be recorded by a credit in the account, and a decrease by a debit.* We have still to consider those transactions that involve profit or expense.

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A General Office

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## Within One's Own Business.

To the student endeavouring to get a firm grasp of the theory of double-entry a warning here may be opportune. Many text-books say that, when a customer buys goods on credit, we must debit the account of the customer with the goods because they are *received* by him, and we must credit Sales Account because the goods are *given* from our stock; that, when he pays, we debit Cash Account because we *receive* the money, and we credit the customer because he *gives* it. It is misleading, however, to present the facts of the transactions in that way.

To say that our customers, Jones & Co., receive goods and so increase their stock, or that they give money and so decrease their bank account, is a statement of something happening in *their* business. But, with events that affect the position of affairs within their business, our books and our book-keepers have nothing whatever to do. The objects of keeping accounts in any business are achieved by accurately and fully recording what happens *in that business* as a result of the transactions carried through. Our books are kept to record the happenings in our business; and the persons with whom we deal keep their books to record what is happening with them.

When we make a sale on credit we debit the customer's account in our books, and we credit our Sales Account, because by the sale *our* book debts are increased and *our* stock of goods reduced. When the customer pays we debit our Cash Account because *our* cash till is then fuller than it was, and we credit the customer's account because *our* claim against him is either so much less or is extinguished altogether. Whatever effects the same or other transactions have within the customer's business should be recorded

by him in his books. They must not appear in ours.

## How Profits Arise.

In a trading business profits arise in the sales transactions; for example, goods bought for £12 may be sold for £15, or £3 more than they cost. A man enters business with the settled purpose of making profits for himself. When, therefore, a profit does occur it adds to the money that he has in his business; and the business, from the book-keeping point of view, owes him more than it did before. Could we assume that the excess of selling over buying price were all profit, the effects of a sale of goods on credit for £15, when the cost of the goods had been £12, might be stated thus—

1. Asset book debts increased £15;
2. (*a*) Asset stock decreased £12;
   (*b*) Liability to proprietor increased £3;

and the Ledger entries to be made for the transaction would be:

1. Debit to the buyer's account £15;
2. (*a*) Credit to Stock Account £12,
   (*b*) Credit to the proprietor's account £3.

## How They are Recorded.

This procedure, however, is not followed in practice, for several reasons. First, the business accounts would be confusingly profuse, if they dealt separately with the profit or loss on every single sale of the many entered into from day to day. The result of the trading can be shown much more clearly and succinctly if presented to the proprietor as a total profit or a total loss on all the sales of a given period. Secondly, profits on single sales cannot be counted definitely as profits actually retained; they may be wiped out entirely by losses made on other sales. Thirdly, excess of selling over buying price is seldom all profit. From the excess there has to be deducted any expenses, such as traveller's commission, directly incurred in effecting the sale. There has to be deducted, also, a due proportion of general expenses, such as rent and rates, not directly occasioned by any single sale, but incurred for keeping the business going as a whole. The sum that will be due to the proprietor is only so much of the "gross profit" as may be left when these charges have been allowed for. To calculate the charges and reach the "net profit" on *single* transactions is usually impracticable; therefore sales, and the profits made on them, are dealt with yearly or half-yearly in the lump. The specimen, on page 416, of a "Trading and Profit and Loss Account" shows how that is done.

## Why a Purchases and a Sales Account?

On first consideration it would seem that the right way to record purchases and sales would be to keep a Stock or Goods Account to represent the asset stock of goods on hand; and, as each purchase or sale took place, to debit or to credit this account with the resulting increase or decrease of the goods in stock. Goods, however, are valued at one price when they are purchased, and at a different price when they are sold. If a single Goods Account were kept it would be difficult to comprehend. The debit side would contain a mixture of entries valued at different prices, part for purchases and part for returns of goods previously sold; and the credit side, similarly, would comprise entries for sales and for returns of purchases, valued at different prices again.

If the entries are to be intelligible it is necessary to keep one account for purchases and returns outwards, both valued at purchase price; and to keep a second account for sales and returns inwards, both valued at selling price. A credit purchase is then recorded by a debit to Purchases Account and a credit to the supplier of the goods, whilst a credit sale is recorded by a debit to the buyer and a credit to Sales Account. Returns outwards are credited to Purchases Account and debited to the creditor; whilst returns inwards are debited to Sales Account and credited to the customer.

## Trading Account.

At the close of each year or half-year the totals of the Purchases Account and the Sales Accounts are brought together in the "Trading Account" as shown on next page. The value of the stock is ascertained independently of the books by making a list of the quantities and prices of all the goods on hand. The difference between the totals of purchases and sales, after bringing in the opening and closing stocks of the period, shows the gross profit made on the sales or "turnover" of the period. This is carried down to the "Profit and Loss Account."

## Profit and Loss Account.

In the Profit and Loss Account, against the gross profit, are set under several heads all the expenses chargeable for the period. If the expenses amount to less than the gross profit and any other gains such as discounts received, the difference is the clear or net profit of the period. It is carried to credit of the proprietor's Capital Account, the balance of which it then increases. Should the expenses amount to more than the gross profit and other gains, the trading of the period would result in a final loss. This loss would, of course, reduce the sum that the proprietor had invested in the business. It would be carried to debit of his Capital Account, the balance of which would then be decreased.

TRADING AND PROFIT AND LOSS ACCOUNT
FOR THE YEAR ENDED 31ST MARCH, 1923

| | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Opening Stock (cost price) | 20,110 | – | 6 | Sales (selling price) | 77,652 | 12 | – |
| Purchases (cost price) | 67,766 | 3 | 9 | Closing Stock (cost price) | 18,563 | 4 | 8 |
| Gross Profit (carried down) | 8,339 | 12 | 5 | | | | |
| £ | 96,215 | 16 | 8 | £ | 96,215 | 16 | 8 |
| Rent and Rates | 620 | 8 | 4 | Gross Profit (brought down) | 8,339 | 12 | 5 |
| Wages | 2,590 | 11 | 1 | Discounts | 65 | 17 | 7 |
| Carriage | 417 | 15 | – | | | | |
| Stationery | 343 | 9 | 2 | | | | |
| Packing Materials | 428 | 5 | 3 | | | | |
| Light and Heat | 163 | – | 4 | | | | |
| Sundry Expenses | 302 | – | 11 | | | | |
| Bad Debts | 94 | 17 | 1 | | | | |
| Depreciation | 202 | 1 | 10 | | | | |
| Total Expenses | 5,162 | 9 | – | | | | |
| Net Profit carried to Capital Accounts: | | | | | | | |
| W. Anderson (£1,621 10s. 6d.) | | | | | | | |
| P. Brown (£1,621 10s. 6d.) | 3,243 | 1 | – | | | | |
| £ | 8,405 | 10 | – | £ | 8,405 | 10 | – |

## Nominal Accounts and Their Purpose.

Besides the accounts kept for purchases and for sales, a separate account is kept for each division of expense. None of these accounts—for purchases, sales, rents, wages, carriage, stationery, and so on—represents in itself either an asset or a liability. Recording neither anything the business possesses nor anything it owes, accounts of this class have come to be called "Nominal Accounts." They are of a kind different from accounts of assets and liabilities. Not one of them appears in that summary of liabilities and assets, the balance sheet. Yet, their combined result figures in the balance sheet. These accounts are, in fact, a series of subdivisions of the Trading and Profit and Loss Account, and their purpose is to keep temporary record of the profit and loss items under various informative heads until the Profit and Loss Account can be prepared. When thrown together in a certain order they constitute the Trading and Profit and Loss Account; and the final balance of that account finds a place in the balance sheet under the head of Capital. It goes there as an addition to capital if the balance represents net profit; as a deduction from capital if it represents a loss.

## Effects of Expenses Incurred.

The effects, then, of an expense incurred—of the payment of electric light account, to take an example, are—

(1) To reduce the liability of the business to the proprietor in respect of profits;

(2) To reduce the asset, cash at bank.

The reduction of liability is debited to the expense account "Heat and Light," which ultimately affects the Capital Account; and the reduction in the asset is credited to Bank Account. The effects of other expense transactions can be viewed in the same way; and the entries we make for these, as well as for the purchase and sale and payment of goods, are at all times records of changes actually taking place in the distribution of the assets or things the business possesses, and of the liabilities or sums the business owes.

## Posting by Monthly Total.

So far debits and credits have been treated of as if each debit and each credit were made singly for every transaction. But that is not what the book-keeper does. In posting purchases, for example, it is necessary that the credits be posted singly to the account of each supplier of goods; but the debits, being all chargeable to Purchases Account, may be recorded quite as accurately and effectively if made in one total for a week or month at a time; and that is the book-keeper's practice.

In Chapter III, whilst dealing with the Routine of purchases, we found that the Purchases Journal was added continuously to the end of each month, and the total then posted in one item to the debit of Purchases Account. For sales the same routine is followed, except that it is then the debits to the customers or buyers that are made singly, and the credits to Sales Account that are made in monthly totals. With some of the more frequently recurring kinds of expense transactions, as carriage, postage, and stationery, the same method may be used, the debits to the

Nominal Accounts being made monthly from the totals of special columns in the Expenses Journal or the Petty Cash Book. The posting of the totals from the Discount columns of the Cash Book is a further example of the same procedure.

## Adjustments at Balancing Time.

At the end of the year or half-year some expense accounts such as rates and insurances may have been paid in advance. Other accounts, as those for rent or electric current, may not have been received, and therefore be outstanding. In all such instances apportionments must be made to arrive at the amounts actually chargeable to the period being dealt with, the excess or shortage being allowed for in the account and then carried down as a debit or a credit to the account for the succeeding period.

## Stocktaking Routine.

As regards the routine of taking stock, it is in few businesses practicable to keep in the Ledgers accurate accounts of the stocks on hand. As a rule the goods in stock must be gone through carefully and methodically before the balance sheet is prepared, and an inventory compiled of the whole. This should be made on sheets or in books kept for the purpose, and should show the description and the quantities held of each article, and the price.

The work of making this inventory of stocks should be begun at a given point in the warehouse or shop or storeroom. One fixture, drawer, or other receptacle, should be exhausted shelf by shelf, and division by division. Then the next should be taken similarly, and the next again, until the last is finished. If the work be left off at one place and taken up at another, some things are sure to be missed in the end. When the whole has been taken down, the list should all be checked over by different hands, watch being kept for omissions and over-statements of quantities, and for errors in price.

In taking down stocks the goods should be listed at cost price, or at the market price to buy at the time of taking stock, whichever of these is the lower. To take stock down at selling prices would mean that profits were taken into account as already made, though the goods had not been sold—profits that might or might not be realized ; and that would belong to a future period, if they should be realized. Wherever goods in stock have depreciated through age or from other cause they should be marked down to what they are worth at the time. Unless these rules are observed punctiliously the stock may easily be made to stand in the balance sheet as an asset of much greater value than it is. The balance sheet would then be an inaccurate and misleading statement of the position of the business.

## Depreciating Other Assets.

Similar consideration apply to stocks of stationery, wrapping materials, packing cases, loose tools and utensils, and the smaller articles of equipment. Lists of these should be made in the same way. Of such assets as buildings, machinery, fixtures, and the heavier furniture, it is not necessary to prepare lists at the close of every period, as such possessions are not likely to disappear in the way that smaller articles sometimes do. Besides, an account for each class of these permanent, fixed assets will already be open in the books. They must, however, be depreciated, and not taken in the balance sheet year after year at the original costs. In time everything material wears out, and allowance must be made for this, the estimated depreciation for the period in review being debited to Profit and Loss Account as part of the expenses of the period, and credited to the appropriate asset accounts.

## Writing Off Bad Debts.

Book debts, also, must be surveyed critically before the total is allowed to appear as an asset in the balance sheet. Accounts that are known to be irrecoverable must be written off, and allowance must be made for the doubtful ones, the amounts written off and allowed being debited to Profit and Loss Account. In the case of debts altogether bad the accounts would be credited with the full amounts and closed. In the other cases the allowance is made as a reserve brought down to credit of Bad Debts Account.

## A Plan of the Accounts.

We give below in outline a complete scheme of accounts for an ordinary trading business of moderate size—

1. Sources of Book Entries—
   (1) For purchases—the invoices received from the suppliers of the goods.
   (2) For returns outwards—carbon duplicates of the debit notes sent to the persons to whom the goods are returned.
   (3) For sales—carbon duplicates of the invoices sent to the customers.
   (4) For returns inwards—carbon duplicates of the credit notes sent to the customers who return the goods.
   (5) For expenses—the demand notes or invoices received.
   (6) For cash received—the carbon duplicates of the receipts given.
   (7) For payments—the cheques drawn, or the receipts or other vouchers obtained.
   (8) For miscellaneous entries—bills of exchange received and given, and other documents or letters in which the transactions arise.
2. Books of First-Entry—
   (1) Purchases Journal for goods bought to sell.

(2) Returns Book Outwards for returns of goods previously bought.

(3) Sales Journal for sales on credit.

(4) Returns Book Inwards for returns of goods previously sold.

(5) Expenses Journal for expenses incurred on credit.

(6) Cash Book for receipts and payments on the Cash and the Bank Accounts.

(7) The Journal, for entries of transactions other than purchases, sales, returns, and receipts and payments of money.

3. Ledger Accounts to which all entries in the books of first-entry must be posted. They include—

(1) Accounts of Assets, always with debit balances, and comprising—

(*a*) Debtors' accounts, and

(*b*) Other accounts of floating assets, as cash, bank, bills receivable, stock;

(*c*) Accounts of permanent assets, as buildings, machinery, and fixtures.

(2) Accounts of Liabilities, always with credit balances, including—

(*a*) Liabilities to outside creditors on trade accounts, on bills payable, and on loans;

(*b*) Liability to the proprietor of the business for capital and profits.

(3) Nominal Accounts, which include the accounts of purchases and sales, and of all expenses. The totals of these accounts are all absorbed by the Trading and Profit and Loss Account, which is compiled from them at the end of each trading period.

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An Attractive Private Office

4. The Balance Sheet, a statement of the position of the business, drawn up at the end of each trading period, in the form of a table of liabilities on the one side and of assets on the other. The balance sheet is a classified summary of all the accounts left open in the Ledgers after the Trading and Profit and Loss Account has been compiled, and the Nominal Accounts thereby closed.

(Reference should be made to the later sections on "Book-keeping for Retailers" and "Book-keeping for Wholesale Houses.")

CHAPTER VIII

# THE FINANCE OF BUSINESS

CAPITAL in greater or less amount is needed in every business. How much is required depends on the size and kind of undertaking, and on how it is conducted. Before a business can be commenced premises must be acquired, and many preliminary arrangements must be made and paid for. It cannot be expected, even when selling has begun, that the return at first will cover all the outlay incurred in effecting sales. The business man must possess a fund to start with, out of which to meet his expenses in full until trading is begun, and then in part until trade has grown to remunerative volume.

## What Capital is Used for.

A manufacturer has to buy machinery and plant for his works; a trader, fixtures and fittings for his shop or warerooms. Both must purchase stocks—of raw materials to manufacture into other things, or of goods ready for sale at once—and both have wages to pay. These all run away with money. When credit has to be given to customers, book debts absorb more money still. And it is not only just at the beginning that the question of available capital claims the business man's attention. So long as he stays in business liabilities will continue to be incurred by him, and will need continually to be met. Creditors who were not paid would stop supplies, and then there would be nothing for the business man to sell. In every business it is an important part of the administrative work to see that funds will be forthcoming for paying creditors' accounts as they fall due.

## Fixed and Floating Capital.

The buildings, machinery, fixtures, and other permanent equipment that a business man acquires are called his "fixed" capital, for the reason that they do not change much or quickly from time to time. Because such fixed assets do not change much they do not require constant attention from the point of view of the capital they contain. Still, they must be kept in continuous repair; and the value they are estimated to lose by wear and age must be taken year by year out of the profits that the business earns.

At the commencement of business, however, they claim a greater measure of attention. The proprietor must then decide how much of his capital to put into this fixed equipment, and how much to keep for the changing forms of stocks of goods for sale, of book debts that result from allowing customers credit, of cash for paying creditors' accounts. What these last-named assets absorb is called "floating" capital, because it changes from one form to another day by day, and hour by hour, as the result of every transaction that takes place. The proprietor must look ahead, too, and lay his plans so that, as his business expands, spare capital will be available for the provision, when needed, of larger premises and more equipment. It is, however, the capital absorbed by trading or floating assets—chiefly by stocks and book debts—that requires his constant care.

## Buying Commitments.

What he has to mind is that too much of the floating capital of the business is not locked up too long in stocks that do not sell, and in book debts that are slow in turning into cash. As regards goods, it is not so much when the goods are in stock, as when the orders are placed for them, that care must be exercised. Orders for purchases are easy to give—much more easy to give than payment is to be made. Unless the business man is careful, he may find that the orders he has placed have committed him beyond what he will be able at any time soon to pay. He may also find that the goods he ordered are more in quantity than he can get customers to buy.

## Sacrificing Stagnant Stocks.

He may find, again, that his purchases turn out to be goods of a kind he is unable readily to sell at all. Stocks that he cannot sell not only contribute nothing to the funds with which he pays his creditors' accounts. They are, in addition, capital lying idle—capital that, instead of standing stagnant, should be used time and time again in buying goods that would sell, and in making profit every time it is so used. Even the careful buyer, then, must keep a watchful eye on his stocks to see that they are moving. If any do not move, to get rid of them now will pay him better in the end, even though he sell them off at considerable sacrifice. The longer he keeps them the less they are likely to bring him at the last. By disposing of them at a small loss before it is too late he will realize his capital immediately. This he can use to earn profits that will soon make up for the loss; and the capital, which otherwise would still be dormant, will then be free for making actual gain, again.

## Watching the Orders Given Out.

Still, as already stated, scrutiny of stocks is not enough. Little satisfaction can be had in repeatedly clearing unsuitable goods after the mischief has been done in bad or excessive buying. Better far would it be to check the wrong tendency at its source in the giving of the orders. Buying should be carried out always with due regard, not only to quality and price, but also to the commitments being entered into, and to the quantity of goods that can be sold within a reasonable time. In a business where orders must be given out long

before delivery is required, the question of buying commitments is of greater importance still. Even when the orders are placed by the proprietor himself, or by a buyer whom he has learned to trust, the proprietor should acquaint himself accurately with the position from time to time. He should have account of these future commitments made up at frequent intervals from the copies that are kept of the orders given out.

## How to Estimate Stocks.

As regards stocks, again, account should be frequently taken of them, also. It will usually be impracticable to make lists of the quantities and values of stocks on hand more often than every half-year; but in a purely trading business monthly estimates can be made with a fair degree of accuracy. The half-yearly or yearly Trading Account discloses the gross profit of the period last ended. Worked out to a percentage of the sales it gives the average rate of gross profit made during the period covered by the account. With this rate of gross profit for the preceding period, and with the current monthly totals of purchases and sales, the stocks can be calculated approximately, month by month, in the manner shown below. The degree of correctness of these estimates is tested by the results of actual stock-taking, when that next takes place.

| | | £ |
|---|---|---|
| Actual Stock on 1st Jan. at cost price | | 11,324 |
| *Add* Purchases for month of Jan. at cost price | | 4,698 |
| | | £16,022 |
| *Deduct* Sales, at selling price | £4,970 | |
| *Less* Profit at 20% | 994 | |
| Leaving Sales valued at cost price | | 3,976 |
| Estimated Stock on 31st Jan. at cost price | | £12,046 |

## Department Stocks and Transfers.

When the business is worked departmentally the calculation has to be repeated for each department, to ascertain the separate stock of each. But, in that case, there must also be taken into account for each department all transfers of goods from the department to others, and from others to it. Each such transfer should be charged on a transfer note sent by the department parting with the goods to the department receiving them. The charge would be made at cost, or at an agreed percentage added to cost, as arranged; and the notes should be passed by the receiving departments pretty much as inward invoices are passed. They should then be listed into weekly totals, and the weekly totals compiled into a table for the whole of the period to be covered by the next Trading Account. Departmental estimates of stocks may be made in the form shown below. Comparison with the stocks held at the same point in the preceding year should not be neglected.

MONTHLY ESTIMATES OF DEPARTMENTAL STOCKS

| Departments | A | B | C | D |
|---|---|---|---|---|
| Rate of Gross Profit earned in preceding year | 25% | 30% | 20% | 33⅓% |
| | £ | £ | £ | £ |
| Stock at 1st Jan., 1923 | 8,321 | 18,495 | 9,566 | 5,704 |
| Purchases for January | 2,827 | 5,896 | 1,916 | 1,401 |
| Transfers from other departments | 67 | 221 | 694 | 130 |
| Gross Profits estimated on the Sales | 788 | 1,613 | 641 | 666 |
| | 12,003 | 26,225 | 12,817 | 7,901 |
| Sales for January | 3,151 | 5,378 | 3,206 | 1,999 |
| Transfers to other departments | 104 | 1,936 | 127 | 88 |
| Stock, estimated, 31st Jan., 1923 | 8,748 | 18,911 | 9,484 | 5,814 |
| | 12,003 | 26,225 | 12,817 | 7,901 |

## Tables of Purchases and Sales.

Bearing on this question of the stocks that are being carried by the business a table of sales and of purchases should be prepared month by month. These would be compiled from the totals of the Sales and Purchases Journals. A form for sales, presumed to be made up to 31st March, 1923, is shown hereunder. In these returns the figures are best given in round pounds only. That makes the results clearer and easier to grasp than when the amounts are burdened with the addition of insignificant shillings and pence.

MONTHLY DEPARTMENTAL SALES

| 1922. | | | | Depart-ments: | 1923. | | | |
|---|---|---|---|---|---|---|---|---|
| Total. | Mar. | Feb. | Jan. | | Jan. | Feb. | Mar. | Total. |
| £ | £ | £ | £ | | £ | £ | £ | £ |
| 9,745 | 3,251 | 3,589 | 2,905 | A | 3,151 | 3,604 | 4,642 | 11,397 |
| 14,886 | 5,774 | 5,243 | 3,869 | B | 5,378 | 5,885 | 8,707 | 19,970 |
| 7,812 | 2,543 | 2,687 | 2,582 | C | 3,206 | 4,380 | 2,687 | 10,273 |
| 4,157 | 1,086 | 1,485 | 1,586 | D | 1,999 | 2,070 | 1,421 | 5,490 |
| 4,631 | 1,271 | 1,698 | 1,662 | E | 1,816 | 2,056 | 1,630 | 5,502 |
| 1,894 | 490 | 671 | 733 | F | 1,471 | 1,320 | 693 | 3,484 |
| 6,448 | 2,081 | 1,993 | 2,374 | G | 2,142 | 2,011 | 2,308 | 6,461 |
| 4,059 | 2,275 | 830 | 954 | H | 1,247 | 1,605 | 1,880 | 4,732 |
| 53,632 | 18,771 | 18,196 | 16,665 | Totals | 20,410 | 22,931 | 23,968 | 67,309 |

## Departmental Trading Account.

The further form given on next page is that of a Departmental Trading Account intended to show at the end of the year or half-year the turnover and the gross profits that each department has made. There are included comparisons with the turnover and profits of the year before. Drawn up in this form the account gives room on one sheet for as many departments as are likely to exist in any but the largest businesses.

## Advantages of Quick Turnover.

A man who turns his stock over five times a year has five chances of making a profit on the capital his stock absorbs. Another man, who holds the same quantity of stock, but turns it over only twice a year, has only two chances of making profit on the same amount of capital used. The former, therefore, is likely to earn more money

DEPARTMENTAL TRADING ACCOUNT

| Departments. | Opening Stocks. | Purchases. | Transfers from Departments. | Gross Profits. 1923. £ | Gross Profits. 1923. % | Gross Profits. 1922. % | Gross Profits. 1922. £ | Totals. | Sales. 1922. | Sales. 1923. | Transfers to Departments. | Closing Stocks. | Departments. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | | | | | | | | | | | | | A |
| B | | | | | | | | | | | | | B |
| C | | | | | | | | | | | | | C |
| D | | | | | | | | | | | | | D |
| E | | | | | | | | | | | | | E |
| F | | | | | | | | | | | | | F |
| G | | | | | | | | | | | | | G |
| H | | | | | | | | | | | | | H |

with the capital he employs. Five profits at a lower rate may be considerably better than two at a higher one; and the smallness of the profits taken may have a good deal to do with the making of a larger number of sales.

Besides, the man with the quick turnover has always newer goods to offer. And customers buy new goods more readily than old ones, and are better pleased with them when bought. The trader who can keep a large variety of goods, and whose connection is big enough to enable him to renew his stocks frequently, has great advantages to help him.

## Calculating the Rate of Turnover.

To arrive at the number of times a business or a department turns its stock over in a year, we proceed as follows—

(1) Ascertain the *cost* price of the year's sales by deducting from the total sales of the year the gross profit that has been made.

(2) Ascertain the *average* stock held during the year by taking the actual or estimated stocks at the end of every month, and dividing their sum by 12.

(3) The number of times stock has been turned over in the year will be shown when the amount of the year's sales, taken at cost price as in (1), is divided by the average stock ascertained as in (2).

If the year's sales were £125,248 and the gross profit £22,936, the cost price of the sales would be £102,312. With the average stock for the twelve months as £23,597, the number of times it had been turned over by sale would be 102,312 ÷ 23,597, or 4·33 times a year. This test is useful for showing whether or not the stock of a business or of a department is being sold as quickly as it should. For a turnover of a given extent the manager of a department is very often held down to only a certain amount of capital for stock.

## Monthly Comparisons of Book Debts.

It will be useful to present to the proprietor, at times between those of the periodic balance sheets, further information still about the position of his business. At the close of each month the total owing by debtors should be ascertained and compared with the figures of previous months and of the preceding year. This shows the capital absorbed by book debts from time to time. The amounts of all the statements made out for a given month could be added together, and a total obtained in that way. But that total would seldom include all the debts on the books, because statements are not always rendered for everything owing right up to the end of the month just closed.

## A Total Debtors' Account.

The following account shows how the full and correct amount of the book debts is arrived at monthly—

TOTAL DEBTORS' ACCOUNT, 31st May, 1923

| | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Debit Balances in Debtors' Ledger on 1st May | 22,546 | 2 | 9 | Cash received for month of May | 16,858 | 19 | 5 |
| Sales for month of May | 17,018 | 4 | 10 | Discounts allowed | 404 | 9 | 2 |
| Transfers to other Ledgers | 8 | 2 | – | Bills received | 583 | 10 | – |
| Other items | 15 | 2 | 5 | Returns inwards | 182 | 5 | 5 |
| | | | | Transfers from other Ledgers | 34 | 2 | 6 |
| | | | | Other items | 4 | 5 | 2 |
| | | | | Debit Balances on 31st May | 21,520 | – | 4 |
| | £ 39,587 | 12 | – | | £ 39,587 | 12 | – |

The Sales total for the month is obtained from the Sales Account in the Nominal Ledger, or from the Sales Journal. Returns Inwards figure comes from the Sales Account, or from the Returns Inwards Book. The amounts for Cash and for Discounts can be quickly extracted from the Receipts side of the Cash Book. Bills Received would be taken from the Bills Receivable book, if one were kept; if not, they would be taken from the Journal. "Other items" on the debit side, would include entries posted from the payments side of the Cash Book, when now and again some money was returned to a customer. All else,

except the transfers, would be extracted from the Journal.

## Transfers Between Ledgers.

Transfers from and to other Ledgers would be for such entries as were made to carry balances of "contra" accounts to, or to bring them from, the Creditors' Ledger. These must be taken into account if our figure for total debtors at the end of the month is to be correct. It is useful to have a small Transfer Book in which to keep record of all such entries. It would also keep record of transfers from the Debtors' Ledger to Bad Debts Account in the Nominal Ledger. The ruling of a suitable form for a Transfer Book is shown.

## Capital Sunk in Book Debts.

The treatment of overdue accounts has been dealt with already in Chapter IV. Book debts have to be carefully watched for the same reason that the quantities of stocks on hand require attention. The more capital that a business man has sunk in book debts, the less capital he has available to pay for new purchases and to allow credit on present sales. It is often the fact that a very large part of a wholesale merchant's capital is being continuously used to stock their shops by some or others of his customers. To a certain extent the wholesaler, too, uses the capital of the manufacturers who supply him with the wares

*Photo lent by* *"The Draper & Drapery Times"*

A Section of the Button and Clasp Department
Of Messrs. Richard Evans & Co. (Watling Street), Ltd.

TRANSFER BOOK

| Date. | A/c debited. | Fo. | Amount. | Fo. | A/c credited. | Remarks. |
|---|---|---|---|---|---|---|
| | | | | | | |

he sells; but it is not usual for the wholesale man to make use of his creditors' capital to anything like the same extent as the wholesaler's customers use his. It follows that more or less of his trading capital is permanently locked up in the debts that are owing to him. Except in so far as it can be looked upon as providing a service to his debtors that helps to retain their custom for him, that part of his capital is unproductive.

## Why Discount is Offered.

For the purpose of setting a limit to the length of credit customers would take, wholesale merchants fix the terms of payment they are prepared to give. And, in order to get in regularly, and in good time, as much as possible of what is owing to them, the terms they offer provide, as a rule, for allowing a liberal discount for payments by stated dates. The practice in regard to these cash discounts was explained in Chapter III. Partly, cash discount is of the nature of interest, being an allowance for payment that gives the creditor the use of the money now, instead of at a later time when no discount would be allowed. Partly this discount is of the nature of a payment for insurance against the risk of losses through bad debts; because the longer a debt remains owing the more are the chances of something happening that will keep the debt from ever being paid.

## Making Profit out of Discounts.

Many business men who have plenty of capital to use, make profits merely by paying their creditors sharply and taking the biggest discounts the creditors will allow. If the discount for prompt payment is greater than the banker's charge for an overdraft, it will pay the trader who can command an overdraft to take the best discounts, and to keep for himself the difference between them and the banker's charge. And, here, it should be noted that, when extra discount works out at a $\frac{1}{2}$ per cent for a month, it is equal to interest at 6 per cent. for the year; whilst discount of 1 per cent for a month is the equivalent of interest at 12 per cent per annum.

Moreover, manufacturers and other holders of stocks are sometimes compelled to sell for cash at once. At such times the ability to pay immediately will often bring a trader the chance of acquiring goods on very advantageous terms, which his slower or less keen competitor never hears of, or hears of but cannot accept.

## Care in Granting Credit.

Just as little comfort can be drawn from watching stocks that are hanging because they were badly bought, so is there small satisfaction in coaxing payment out of debtors to whom credit should never have been allowed. Care of book debts begins at the source of the debts, at the point in any transaction when the giving of credit is sanctioned. The passing of orders for credit was discussed in the early part of Chapter IV; also the different ways of discovering what is the reputation of a new customer in the matter of paying his debts. In the granting or withholding of credit to a doubtful customer two questions must be kept in mind—

(1) Are we willing to be deprived, for the length of time a slow payer will take to settle his account, of the use of the capital that the proposed debt will represent?

(2) Are we taking in an unusual degree the risk of losing the capital altogether in granting credit to a customer who may never pay?

## Treatment of Debts that are Bad.

Notwithstanding every ordinary precaution bad debts are incurred sometimes. As soon as a debt is known to be bad it should be written off to Bad Debts Account. At the end of the year, when the total of bad debts is transferred as a loss to Profit and Loss Account, allowance should also be made for book debts the recovery of which is doubtful. Unless bad and doubtful debts are so treated in the Profit and Loss Account, the Balance Sheet will not show the asset book debts at its true value, and will to that extent be an inaccurate presentation of the state of the business man's affairs.

## Expenses Must be Watched.

No business can be kept financially sound if it constantly makes losses. From the financial standpoint it is, therefore, important to keep the expenses well within the amount of the gross profit earned. A business is of no use to its owner unless it can, after meeting all expenses, yield a surplus of profit sufficient to compensate him for the time and trouble he spends upon the business. Expenses, then, must be closely watched, and that is one of the reasons why they are grouped in the accounts under a number of heads. A better check can be kept upon them if they are watched, division by division, than could be kept if all were lumped and treated as a whole.

## Comparison by Percentage.

The check on expenses becomes more effective still if the total under each head, for the whole or a part of a year, is compared with the year before. With this object in view the Profit and Loss Account is usually presented in a form similar to that on page 424. Owing to difference in turnover it is not readily seen at first whether, for example, wages at £2,730 in 1923, against £2,530 in 1922, is more or less in proportion to the turnover of the year. That is why each head of expense is shown as a percentage of the sales or turnover of the year to which it belongs. In the

COMPARATIVE PROFIT AND LOSS ACCOUNT

| | 1923 | | 1922 | | | 1923 | 1922 |
|---|---|---|---|---|---|---|---|
| | £ | % | % | £ | | £ | £ |
| Opening Stock | 12,740 | | | 11,570 | Sales | 32,500 | 31,400 |
| Purchases | 24,050 | | | 24,900 | Closing Stock | 12,350 | 12,740 |
| Gross Profit, carried down | 8,060 | 24·80 | 24·43 | 7,670 | | | |
| | 44,850 | | | 44,140 | | 44,850 | 44,140 |
| Wages | 2,730 | 8·40 | 8·06 | 2,530 | Gross Profit brought down | 8,060 | 7,670 |
| Rent and Rates | 820 | 2·52 | 2·61 | 820 | | | |
| Light and Heat | 390 | 1·20 | 1·21 | 380 | | | |
| Stationery and Printing | 310 | 0·96 | 1·05 | 330 | | | |
| Carriage | 380 | 1·17 | 1·24 | 390 | | | |
| Sundry Expenses | 1,170 | 3·60 | 3·41 | 1,070 | | | |
| Bad Debts | 100 | 0·31 | 0·41 | 130 | | | |
| Depreciation | 160 | 0·49 | 0·54 | 170 | | | |
| Income Tax | 280 | 0·86 | 0·96 | 300 | | | |
| Total Expenses | 6,340 | 19·51 | 19·49 | 6,120 | | | |
| Net Profit | 1,720 | 5·29 | 4·94 | 1,550 | | | |
| | 8,060 | 24·80 | 24·43 | 7,670 | | 8,060 | 7,670 |

percentage figures the portion of every division of expense that is chargeable on £100 of sales is given to two decimal points of £1. The figures for both years, being all reduced to the common basis of so much for every £100 of sales, can thus easily be compared.

## What Comparisons will Reveal.

Should a striking difference appear under any head, it puts the proprietor on enquiry about the cause. In that way he may be led to discover waste or leakage which, without the aid of these comparisons, might long continue undetected. In a trading business the average percentage of profit that is added to the cost price of articles to give their selling price should correspond approximately to the percentage of gross profit shown in this account. If it does not enquiry, again, should be made into the cause of the discrepancy.

## Rate of Return on Capital.

The net profit, shown in the foregoing account, of roughly 5 per cent on the sales of the year does not mean that this is the rate of return earned on the capital employed. The return on capital probably comes out much higher. What rate it does come out at depends on how often the capital used for stock is turned over in the period, and on how much capital is kept in forms other than stock. Where the capital of a business was £40,000, and the turnover £100,000, 4 per cent net profit on the turnover would mean a return of 10 per cent on the whole of the capital in the business.

## Funds for Expansion.

The healthy business is one that grows. Where the volume of trade does not increase it is much more likely to shrink than to remain the same. The healthy business, then, because it is an expanding one, needs more and more capital continually. As it grows more money has to be put into machinery and fixtures, more into book debts, and more into stocks. The soundest way of financing growth is to leave profits in the business, the proprietor drawing out habitually less than the business makes. Part of each year's gains is then set to earn further gain in the next year; and, so long as the proprietor can keep this process going, his interest in the business and his wealth increase steadily and surely. The business, too, remains in the fullest sense his own.

## Raising Loans.

But, under able and enterprising management, the growth may be a more rapid one than this method can finance. Recourse must then be had to bringing in the needed increase of capital from outside. And, for a business that is flourishing and promising a good return, money is not difficult to procure. Until a more permanent arrangement can be made accommodation can usually be obtained from the bank in one of the ways described in Chapter VI.

Money for financing the activities of a growing business may be raised by mortgaging the business property. A loan of moderate amount on such security can usually be arranged through solicitors, who often have clients with funds to spare for safe investment. Interest has to be paid, of course. Where new or bigger premises are needed they are frequently provided largely by mortgage loan made on security of the premises themselves. A few businesses are such that they can appeal to their circle of customers for small loans or "deposits" at a fixed rate of interest. Promissory notes, payable on short notice, are then given in acknowledgment of the sums lent. Some capital can be obtained by taking long credit for purchases and by offering attractive discounts for immediate payment of sales. But these practices make, on creditors and customers alike, an impression of neediness, and they tend to give to the business a reputation that is only second rate.

*Photo lent by* *"The Draper & Drapery Times"*

SECTION OF FANCY HOSIERY SHOWROOM
Messrs. Sharp, Perrin & Co.

## Taking in a Partner.

A permanent arrangement that may be resorted to is the admission of a partner with money to bring in. If the partner is a man of ability room will easily be found in a thriving business for his services. On admission of a partner it is usual for the original proprietor to put an agreed value on the connection he has created. The value agreed is then added to his Capital Account, and is debited to a Goodwill Account, which afterwards appears as an asset in the partnership balance sheet. As the connection was brought into existence by the first proprietor, it is only right that its value should be placed to credit of his Capital Account. The new partner's capital then buys part of the goodwill of the business, as well as part of each of the other assets.

## Offering Shares to the Public.

Where a business continues to expand the usual course nowadays for raising further funds is to convert the partnership into a company, and then invite the public to subscribe for shares in the company's capital. The manner of forming and floating a company is the subject of another section; also the limitation of members' liability,

which is a main attraction in company proprietorship. There it is explained, too, that the shares into which a company's capital is divided may be shares of different kinds, the chief distinction between the classes being rights to different rates of dividend out of the profits that the company earns.

Shares are commonly of the nominal value of £1 each; and an offer to the public is usually made by a prospectus printed and circulated through the post, and advertised in the daily press. Subscribers to whom shares are allotted become members of the company. The control of the company's affairs, however, rests almost entirely with the Board of Directors. As a rule one-third of the members of the board retire each year, and such influence as the shareholders have in the control of the company is exercised by voting at the company's annual meeting for the re-election of the retiring directors, or for the election of others in their place. For some matters, mostly relating to changes in the company's articles of association or in its capital arrangements, the sanction of the shareholders must be obtained at an extraordinary meeting called for the special purpose.

## Issue of Debentures.

A company may, however, raise money from the public by the issue of debentures instead of shares. Debentures are not treated as part of the capital of the company, because: (1) the interest due to debenture holders, like interest on a loan, must be paid even if the company makes no profit; (2) the holders of debentures have no right of access to, or of vote at, the meetings of the members. They are merely creditors of the company; but the debentures they hold are almost invariably secured by mortgage or charge on the company's property. Debenture holders are, therefore, secured creditors who can enforce their claims to interest and to repayment in priority to creditors on ordinary trade debts. And the claims of ordinary creditors have, of course, also to be satisfied before shareholders can get repayment of their capital, when a company comes to be wound up.

A company doing well issues debentures rather than shares, because, the debentures being secured, the rate of interest they take is less than the dividend that shares would claim. This leaves so much more profit for the proprietors of the company to divide amongst themselves, without bringing new members in to share it. Also, should the company continue to prosper, the debentures can be paid off out of undivided profits, whereas shares cannot be repaid until the company is wound up. Repayment makes the company's finances sounder, and its dividend-earning capacity greater than before.

A company not doing well, but in need of increased funds to operate with, issues debentures because it has no choice. The payment of dividend on a new issue of shares by a company so situated would be too problematical for the public to take the issue up. The issue of debentures, secured in regard to repayment and to interest, will bring a response to such a company, when the issues of its shares will not.

(Reference should also be made to Section 8, The Financing of Business.)

SECTION 7

# Letter Writing for the Business Man

CHAPTER I

## THE REQUISITES OF GOOD CORRESPONDENCE

It is not easy to write a good business letter; on the contrary, the art of writing such a letter—clear, concise, and business-like—is an accomplishment of which anyone may justly be proud. And it is not a matter which should be given little attention by the progressive business man. It has been truly said that the correspondence outwards has much more influence on the Balance Sheet than is generally supposed; in other words, the well-written business letter is in itself a very effective advertisement of the firm from which it is issued—an advertisement showing a good return. The badly typed, mis-spelled, ungrammatical, badly composed communication, on the other hand, is such as to give the impression of careless and unsatisfactory methods of business, and its recipient will be chary of trusting its sender with orders of any great importance.

### Two Important Requisites.

The business letter should, above all, be *clear* and *brief*. There is no time in business for the reading (to say nothing of the writing) of masterpieces of literature in letter form. Avoid long sentences if you would make your meaning clear, and choose simple language for the expression of your ideas. Another aid to clearness is to confine each paragraph to one topic. Some firms give each paragraph a heading, but this is hardly necessary except perhaps in the case of a long letter dealing with a variety of subjects.

We said that the good business letter is brief. But it should not be brief at the expense of clarity or of courtesy or of grammatical accuracy. It is easy enough to be brief and clear and polite at the same time. It may be said that all the other requisites of a good business letter are subordinate to that of clearness—in fact they are helps towards clearness. Unless a business letter is readily understood, it is useless—it may be worse than useless. There should be no possibility of doubt as to the right meaning. The letter must cover the ground required by the immediate situation, but it must not attempt to do so much as to sacrifice finality or decisiveness.

### Neatness.

A letter should be neatly "turned out." Typists who take a real pride in their work are "advertisements" of considerable value. In particular, the first letter to an enquirer should be a "model" one, as first impressions are by no means unimportant in the business world. A man has been known to judge the quality of goods by the quality of the letter which was received in regard to them.

As regards letter paper, this should be of good quality and preferably white.

### Accuracy.

A business letter, it is hardly necessary to say, should be accurate in the facts mentioned therein. Sums of money are preferably written first in figures and then, in brackets, in words; Thus: £1,328 (One thousand, three hundred and twenty-eight pounds). As a business letter is often in the nature of a contract, and frequently contains statements that will bind the writer, it will be obvious that strict accuracy as to facts and figures is of the first importance.

There should be no error in the use of words and phrases—the letter should be grammatically accurate. And here it should be said that a good dictionary should be found in every office, and the meanings of words looked up in case of any doubt. The typist should not be depended upon to put the business man's spelling right, though we have known cases where this was so! It is for the dictator to spell over any unusual words to the typist when he is dictating; this is far better than correcting mis-spellings when the letter comes along for signature.

To use words in an appropriate manner, however, demands more than dictionary reference. Study of the words used by good writers, and constant practice in the use of words are necessary.

### Commercial English.

The letter should be written in good English, but it should not use all the expressions that a writer would use in, say, a poem, play, novel or essay. It should be written in what is called Commercial English, bearing in mind the fact that literature may say much and mean little, but business expression must mean much and say little.

The reader may ask, is there any form of English that may appropriately be designated Commercial or Business English? It may be argued that, apart from the use of technical terms, of which some are general and applicable to all businesses and others are special and applicable only to

particular businesses, there is no distinct form of English that can properly be described as "business English." There is certainly some truth in this, but it leaves out of account certain important facts. Business English differs from literary English. As we have before remarked, it does not aim at picturesqueness. It does not resort to attractive metaphors, striking similes or elaborate figures of speech. On the contrary, it avoids most carefully those features of literary English. It does not endeavour to suggest but to express the meaning intended to be conveyed, nor does it choose words on account of their rhythm but on account of their clearness and suitability to the occasion. It demands that what is written shall directly convey to the mind of its recipient the precise meaning in the mind of the writer. It calls for the expression of that meaning in clear, simple words, employed with strict accuracy, without repetition and without unnecessary verbiage. It emphasizes the supreme importance of precision, and it values brevity. It is indifferent to the employment of ornament where business affairs are concerned, not from any objection to ornament in itself, but because it is unnecessary for the purpose in view.

Business English, therefore, means exact and straightforward English, and represents a form of skill that is needed outside the business office as well as inside it, but that is emphatically needed within it.

## "Your Letter of Yesterday's Date."

This chapter would be incomplete were the extremely important "requisite" of early reply omitted. Some firms seem to have a habit of replying to letters weeks after they have been received; in fact, in some offices, to reply to a letter within a week from its date is looked upon as something quite extraordinary. Now this should not be so. With any staff that has any pretence of being organized at all, letters should receive attention at least on the day following that of their receipt. In some cases, of course, some amount of investigation and consideration is necessary before a complete reply can be given; but even here, a reply to part of the letter (or, at any rate, an acknowledgment of its receipt) can be despatched almost immediately.

Some managers of firms seem sadly lacking in organizing ability; their departmental managers receive letters passed on by them weeks after date.

*Photo* *Keaneys, Ltd.*

A Corner of the General Sales Office of Industrial Rubber Products, Ltd.

With a little re-arrangement of duties or a little reorganization of office work, managers ought to be able to pass out of their office to the departmental heads all letters received, with so little delay that the letters may be replied to within a day or two. This refers, of course, to those offices in which the manager's department opens all the incoming mail. It is most annoying to the head of a department to receive, from his superior, week-old letters that could very well have been dealt with immediately upon their arrival on the firm's premises. Where the departmental head replies to these letters, he hardly dare apologize for the delay—that might annoy the manager when reading the copies of the outward mail. When writing on, say, the 27th, he does not like to begin his letter "In reply to your enquiry of the 3rd"—that looks rather ridiculous. What he has to do, therefore, is to get round the difficulty by beginning "Your enquiry regarding the shirtings has been the subject of careful investigation, and we are now able to inform you," etc.

Such difficulties of which we have been speaking are small in themselves but all help to cause a wrong spirit in the office, to say nothing of their bad effect on the customers or likely customers of the firm. It would not be so bad if there was no easy and ready solution; but there seems no excuse for delay in the great majority of cases that come to the writer's notice from time to time.

It is certainly nice for a would-be customer to read: "In reply to your letter of yesterday's date"! Such promptness has an effect that shows itself in increasing business. On the other hand, a dilatory firm is breaking down and not building business. We might adapt an old proverb to meet the case—"Procrastination is the thief of business"!

## CHAPTER II

## DIVISIONS OF A BUSINESS LETTER

A TYPICAL business letter may be divided into the following parts: Heading (printed portion; reference; date); Inside address; Salutation; Body; Complimentary close; Signature. Each of these parts will receive our consideration in the present chapter.

### Letter Heading.

First of all as to the important matter of the "letterhead," with which is, of course, connected the question of appropriate stationery. We have already said that the letter paper should be of good quality. The printed heading should be in keeping with the quality of the paper and the particular kind of business with which it is associated.

The letterhead is not intended as a "display advertisement," neither should it be a picture gallery. It can advertise by its dignified appearance, its informative character, its "good taste." It should not be forgotten that letter paper is to write letters on—long ones, sometimes; the heading should, therefore, not take up too much space. It is becoming the practice in some of the leading firms in the country to reduce the letterhead to quite small proportions. All that is necessary is—

(*a*) The name of the firm in distinctive type;

(*b*) Perhaps a one-line description of the firm's trade (for example, "Makers of high-class leather goods");

(*c*) The address; and

(*d*) Telegraphic address, code information, and telephone number.

While on this subject, it should be mentioned that it is a bad policy to have a date line (such as .....192...) printed in the heading. This is of little assistance in hand-written communications, and is a nuisance to typists where letters are typewritten; time is occupied in arranging so that the typewritten date will fall in the particular place allotted to it.

Some firms add the names of their principal officers (directors, secretary, etc.), to the heading, some give the addresses of their branches, some state that "Letters should be addressed to the firm and not to individuals"—all these points are matters depending upon particular circumstances and individual preferences. No rule can be laid down—suffice to say that the heading should be as brief as is possible in the circumstances of the particular case.

NOTE.—In the case of firms or persons carrying on business under a name which does not consist of the true surname of all partners, the provisions of the Registration of Business Names Act should be borne in mind. Under Sec. 18 of that Act it is provided that "Every individual and firm required by this Act to be registered, shall, in all trade catalogues, trade circulars, show cards, and business letters, on or in which the business name appears; and which are issued or sent by the individual or firm to any person to any part of His Majesty's Dominions, have mentioned in legible characters (*a*) in the case of an individual, his present christian name or the initials thereof and present surname, any former christian name or surname, his nationality if not British, and if his nationality is not his nationality of origin, his nationality of origin; and (*b*) in the case of a firm, the present christian name and the initials thereof and present surnames, of former christian names and surnames, and the nationality if not British, and if the nationality is not the nationality of origin, the nationality of origin of all the partners in the firm, or, in the case of a corporation being a partner, the corporate name."

The type used should be neat; beware of ugly "decorative" styles and the use of too many varieties of type. Colours should be used sparingly; usually they are not worth the additional expense.

## Reference.

In the actual letter, the first item is the reference, that is, the particular letters or figures which are to be quoted in any reply so as to facilitate reference to the particular department concerned and to enable the reply to get into the right hands. The reference is usually—

(1) The name of the department sending out the letter, as—

OUR REF. *Advert. Dept.*

or (2) The initials of the person who dictated the letter (possibly with those of the typist) or those of the writer of the letter, thus—

AB/CD.

or (3) A number corresponding to the page in the copy letter book, as—

In reply please quote C 127.

In (2) above, it should be mentioned that the usual practice is to put the initials of the dictator or the head of the department first, and then those of the typist. In the illustration, the letter may be that of Mr. Albert Brown, typed by Clara Dowler. In (3) the reference is to, say, page 127 in the letter book of C Department.

While on the subject of the letter reference, it would be well to emphasize the necessity of quoting the reference when replying to a letter. It is a small matter to do this, but is of great assistance to a firm which receives many letters in the course of a post. Where references are quoted, letters can be sorted into their various sections in the minimum of time. Where a reply to a letter is received and no reference is given, it often passes from department to department in a firm of any size in an endeavour to find the writer of the letter to which it is a reply. Delay results.

In a reply, the reference may be given immediately above the body of the letter or incorporated in the first sentence, as : "*In reply to your letter of yesterday's date, reference EF/GH, we . . . .*"

## Date.

Needless to say all letters should be dated. The date should follow the address at the top right-hand side of the letterhead) and (in this country, at any rate) should be given in order of day, month, year ; thus—2nd April, 1923. Many modern firms put simply 2 April, 1923. The abbreviations *th, nd, rd*, etc., are going out of use, as they do not really assist the reading; 2 April, 1923, is just as clear as 2nd April, 1923. The latter, however, has a more "English" appearance ! Bad forms are 2 . 4 . 23 ; April 2, 1923 ; etc.

## Inside Address.

Now we come to the address of the person for whom the letter is intended. The name, title, and address, of the addressee are generally placed at the top left-hand side of the paper immediately before the salutation. Some firms, however, prefer it at the bottom of a letter. There is no particular advantage of one method over another ; all depends on the writer's particular preference.

The title *Messrs.* is often quite wrongly used. The rule is : When a firm name contains two or more surnames, or is such as to indicate more than one individual, precede it by *Messrs.*, thus—

*Messrs. Johnson & Brown, Ltd.*
*Messrs. Thomas & Sons.*

An impersonal name does not necessitate the use of *Messrs.*, thus—

*The Woolwich Clothing Stores.*
*The Institute of Certificated Grocers.*

Where the name of the firm contains a conferred title, *Messrs.* should not be used, thus—

*Sir Isaac Pitman & Sons, Ltd.*

Many mistakes occur in addressing a firm composed of ladies. Unless it is evident or it is otherwise known that the proprietors of a firm are ladies, it is wise to treat the name in the ordinary way. In the case of a firm of ladies, all difficulty is avoided by addressing the letter to the Manageress, thus—

*The Manageress,*
*Flora Jones & Co.*

## Salutation.

The following are the forms of salutation used in business correspondence : Sir or Sirs, Dear Sir, Dear Madam, Dear Sirs, Gentlemen, Mesdames. *Gentlemen* is the preferred form when more than one man is addressed. The abbreviation *Gents.* is impolite, while *Dear Gentlemen* and *Dear Madams* are quite illiterate. The salutation should be written at the left of the paper, a space or two below the inside address, and should be followed by a comma.

## Body of Letter.

The most important part of the letter is, of course, the "body." Although there are certain rules that should be obeyed by anyone who wishes to become a good business-letter writer, strict observance of these rules alone will not make a letter a good one. In fact, a letter may be an utter failure though such rules are followed with the greatest care. The vital part is the subject matter—saying what you have to say in such a way that the receiver knows exactly *what* you have to say. The composition of a business letter demands our consideration at some length, and so is allotted a separate chapter. (*See* Chapter III, THE COMPOSITION OF A BUSINESS LETTER.)

As to the usual rules for setting out the body of the letter these are soon dealt with. In the first

place, the body should begin on the next line below the salutation. A uniform margin should be kept at the left-hand side of the letter paper (about an inch is usual), and at the right-hand side an endeavour should be made to keep the endings of the lines as nearly uniform as is possible. Paragraphing is important; the rule is: begin a fresh paragraph for each new subject or topic, treating the various points as far as possible in the order of their importance. Each paragraph line should begin at the same distance from the edge of the paper as that of previous paragraph lines—about an inch from the beginning of other lines is usual.

When writing a letter, care should be taken to see that the body leaves ample room on the page for the complimentary close and signature. In long letters, a "continuation sheet" should be used for containing at least a few lines of the letter as well as the close and signature; it is considered "bad form" to use a continuation sheet for the complimentary close and signature only.

"Write on one side only" is the rule in business letter writing.

## Complimentary Closing.

The following complimentary closings are best used in business letters—

Yours faithfully.
Yours truly.
Yours respectfully.

The first letter only should be capitalized, while the correct punctuation is a comma after the last word. Usually the complimentary closing begins about the middle of the line a space or two below the last line of the body of the letter. It should be in harmony with the salutation, i.e. if the salutation is *Gentlemen*, it will be wrong to close *We are, Dear Sirs*. It must be *We are, Gentlemen*. Care must also be taken to use the correct personal pronoun in the first line of the close. If we begin *I remain*, we cannot sign *Jones & Brown*.

The attachment of such words as *and oblige* or *I remain* to the complimentary closing in business letters is gradually falling into disuse. In any case, it is seldom that they serve any useful purpose; and they are generally connected with other hackneyed expressions, as—

*Thanking you in anticipation,*
*I am,*
*Yours faithfully,*

or used in wrong constructions, as—

*Trusting to have an early reply.*
*Yours truly.*

In this last instance, the participle *trusting* is unrelated; that is, it is not attached to any noun or pronoun. *Trusting to have an early reply* is not a complete sentence, and should not, therefore, have a full stop after it.

## The Signature.

The signature of a business house, unless it is written by the principal of the business, must always be followed by the initials or the name of the person who takes responsibility for the letter. In the case of letters sent out by a limited company, it seems the better method to follow the name of the company by the person's signature, giving his position underneath.

Examples of good signatures are shown below—

Yours truly,
JOHN JONES & SON, Ltd.
p.p. *WAB.*

Yours faithfully,
per pro. J. JOHNSON & SONS, Ltd.
*Thomas Jones,*
Secretary.

Yours faithfully,
SIR ISAAC PITMAN & SONS, Ltd.
*G. K. B.*

We are, Sir,
Yours respectfully,
THE NEWS SUPPLY AGENCY,
*Alfred Agnew,*
Publicity Manager.

Very truly yours,
JOHNSON & JOHNSON, Ltd.
*Alfred Johnson,*
Director.

Yours faithfully,
*G. Kenneth Brown.*
G. KENNETH BROWN.

We are,
Yours faithfully,
*M. A. Fairbrother,*
For BENHAM & SONS, LTD.

In the case of a personal or a firm signature, it is preferable to have the name typed below the actual signature, so that the recipient of the letter shall have no doubt as to the proper spelling of the name. An example is included in the above list. How often do we receive letters the signatures of which are quite illegible?

The full name of the firm or company should, of course, be used for the signature. A company with the title of John Jones & Sons, Ltd., should not have its letters signed *J. Jones & Sons, Ltd.*, as that is not the correct name of the firm.

## Postscripts.

In business letters postscripts should be avoided. Sometimes, however, after the completion of a letter a point crops up which has reference to what has been already stated, and so a postscript cannot very well be avoided. In such a case it should begin *P.S.* and should be initialed or signed just as in the case of a letter.

### Enclosures.

In the case of letters which will have enclosures to go with them, it is wise to note the fact, either at the top or at the bottom of the letter, thus: 2 *enclos.* Some firms use gummed slips for this purpose, others have it typed on the letter. The object is, of course, to draw attention to the fact of the enclosures when the letter is being put into its envelope, so that the documents will not be omitted.

### Memo. Forms.

For very short messages a half-sheet of quarto paper is often used, and is headed "Memorandum." It is headed just as an ordinary letterhead, but it is not generally necessary to sign in full the communication thereon; initials are usually quite sufficient.

## CHAPTER III

## THE COMPOSITION OF A BUSINESS LETTER

WHILE there are certain rules that must be complied with in the composition of the "body" of a business letter, standardization of form is not possible, nor is it desirable. Form letters, that is, letters which are of a "stock" type, while of great use in their proper place, should not be used indiscriminately as they become stereotyped and lack the important element of personality.

As each letter should be written to fit one special situation, there can be no exact standardization or model form. All that the writer of the present section can do, therefore, in this and the following chapters—all that he desires to do—is to set out the recognized correct methods of composition and to give examples for illustration only.

The writer or the dictator of a business letter should fully realize the importance of his work. As previously mentioned in these pages, the business letter is a factor of no little importance in the success of any firm.

### Collecting Data.

Never begin a letter until you know exactly the lines on which it is to proceed, and have all the information at hand to enable correct and "smoothly running" paragraphs to be dictated or written, as the case may be. Nothing results in so much waste of time as the composition of a business letter in "patches." For instance, there is the dictator who, owing to lack of proper preparation, begins his letter and then "flounders about" (there is really no other expression so suitable) until he has very little idea of what he *has* said. The typist, too, is in little better position, as her notes are very disjointed, with sentences and paragraphs inserted in various places.

In the first place, then, have before you all the data necessary to enable you to compose a pertinent, clear, brief but courteous note.

### Constructing the Letter.

We have said that the lettter should be pertinent; that is, it should be suitable to serve the purpose for which it is written. It should be perfectly clear, and as brief as is possible to express that clear meaning and as is consistent with courtesy. Business letters are not the place to express sensitiveness and irritability or satire and gibes.

In his efforts to be perfectly clear, a writer should be careful not to be guilty of tautology; he should not use two or more words that mean the same thing. For instance, we have seen *entirely eliminate, completely finished, very best, great big,* etc. In each of these cases, one word is superfluous. Redundancy and verbosity are other frequent errors. Mere wordiness in a business letter is bad; but the brevity that is so desirable should not be permitted to degenerate into abruptness. It is possible to be brief and at the same time clear and courteous.

### Paragraphing.

Something has been said in Chapter II about paragraphing, so that we need not say much more on the matter. A change of topic demands the beginning of a fresh paragraph. Sometimes it may be advisable to write two letters to one firm by the same post, where two quite distinct matters affecting, say, two different departments of the firm, are to be dealt with. This prevents any delay that might be occasioned by the passing of one letter from one department to another.

Paragraphing, besides being a great aid to clearness, is of value in adding to the attractiveness of a letter. The "solid" letter is stern and forbidding. As in advertisements, so in the business letter, "white space" has some value.

### Form Paragraphs.

Some firms may find that parts of many letters they receive call for the same reply. For instance, after an advertisement offering, among other things, a sample of, say, an ointment, most of the letters received call for the same reply regarding the sample. Many of the letters would deal with other matters as well, but the request for the samples would appear in most of them. Replies may all quite well be entirely the same where all the letters received refer to the same matter, especially where there is a large mail. In many cases, however, where there are not so many letters to reply to, the "personal touch" may be given to them by adding to certain "form paragraphs" some few lines particularly applicable to the individual case.

*By permission* *The General Electric Co., Ltd.*

A Typewriting Office of Messrs. Furness, Withy & Co., Ltd.

Where form paragraphs are used, the usual plan is to keep a book containing suitable ones, each being given a number. The dictator of a letter would indicate, say, "Form par. 6," "form par. 10," and so on, when dictating, bringing in these perhaps in the middle of his own composition. This saves time in dictating, and the typist looks up the paragraph required and inserts it in her letter at the proper point.

### The Word to Use.

As a rule, the simpler a word the better. Foreign words and phrases are likely to be misunderstood and therefore should not be used in business letters. Slang, it is hardly necessary to say, is also quite out of place. Technical terms are, of course, freely used in business letters addressed to persons in the same line of business. Each branch of trade has its own technical expressions, and as these have a recognized and invariable meaning there is nothing to be gained by ignoring them. When writing to strangers, however, it is as well to make quite clear the meaning of any such term which it is necessary to use.

### An Elementary Example.

It is not always easy for the letter-writer to make up his mind exactly what he wants to say, but it is useless to begin a letter before having decided upon all the points that are to be dealt with. Let us take a simple example. Suppose we desire to order 5 tons of coal for our factory, the following points will have to be covered by the letter—grade of coal, mode of delivery, place of delivery, time of delivery, price, particulars of payment. A letter which is clear, brief, and complete might read thus—

*Messrs. Abbott & Son, Ltd.,*
*Balmoral Road,*
*GILLINGHAM, Kent.*

*Gentlemen,*

*Kindly forward by South Eastern Railway, to reach our Bulwell Sidings as early as possible,* 5 (*five*) *tons of best Cobbles, price* 42*s. a ton in accordance with your quotation of the* 1*st instant.*

*Cheque covering this amount* (£10 10*s.*) *is enclosed.*

*Yours faithfully,*

## CHAPTER IV

## SOME REMARKS ON GOOD ENGLISH

This is not the place to give lessons on English grammar, but a few notes on the principal errors found in business letters will, no doubt, be useful.

### Personal Pronouns.

In the first place, nothing is so irritating in a business letter as the constant repetition of a personal pronoun, e.g. *I shall be glad* (etc.), *and I hope that* (etc.). *I ought to mention that I think I shall go* (etc.), *and I am, therefore* (etc.). A re-arrangement of a sentence will prevent such a recurrence of a personal pronoun. For instance, if the pronoun *we* has been repeated too frequently, and it is desired to avoid it in the sentence *We have previously advised you of this,* this can be done by altering the wording to *You have previously been advised by us of this.*

If a complaint is being made regarding the packing of goods, it is not necessary to say *We are of the opinion that the cases were never intended for the purpose to which they have been put, being much too fragile.* The simple statement, *The cases were far too fragile for heavy goods,* implies that the writer is giving his opinion so that there is no need to mention it as a special item.

But do not go to the other extreme and omit personal pronouns that are necessary for the correct reading of the letter. The following sentence, for example, is vague and likely to be misunderstood—

*We wrote to you yesterday, and as have had no instructions since, sold the goods.*

The construction of a sentence sometimes leads to the insertion of a personal pronoun where it is not really wanted. Look at this sentence: *These special sizes being difficult to obtain, they can be supplied only at a higher price.* The writer of it is under the wrong impression that the first part of the sentence, *These . . . obtain,* is a complete statement, whereas the expression *These special sizes* (qualified by the participial phrase—*being very difficult to obtain*) is the subject of the verb *can be supplied,* and therefore *they* is unnecessary. If he had begun with an adverbial clause, *As these special sizes are difficult to obtain,* the subject would have a verb in agreement with it; and it would be correct to insert *they* as the subject of the following verb.

### Conjunctions.

In a compound sentence, the general rule in business is not to use the same conjunction twice in succession. Thus: *I was there yesterday and bought the shirtings and now offer them at a bargain price* is faulty. It would be better to say: *I was there yesterday and bought the shirtings. These are now offered,* etc., or: *I was there yesterday and bought the shirtings which are now offered,* etc.

### Sequence of Tenses.

How often do we read *I should be glad if you will,* and *I shall be glad if you would*? "Should" and "will" are different tenses, as are "shall" and "would." As the future tense is indicated by "shall" and "will," and "should" and "would" are conditional, the sentence should read either—

*I shall be glad if you will . . .* or
*I should be glad if you would . . .*

## Participles.

In Chapter II we have mentioned the frequent use of the unrelated participle in the closing sentence of a letter. *Thanking you in anticipation, Yours truly,* is a wrong construction, the participle *thanking* being unrelated and so requiring a noun or pronoun added in such a form as the following—

*Thanking you in anticipation,*
*We are,*
*Yours truly,*

## "Same."

This word is often quite wrongly used in business letters. It is incorrect when used as a pronoun, as in the sentence *We will give your account credit for the same.* This should read *We will give your account credit for it.* In business letters "same" is the most persistent among the condemned stock phrases. It is always easy to avoid by the substitution of "it," "they," or "them."

## Order of Words.

By changing the order of words in a sentence, quite different meanings may be conveyed. In particular, qualifying words and phrases must be placed as close as possible to the words they qualify if the same meaning is to be understood by both the letter-writer and the recipient of the letter. For example, if we wrote *We are quite satisfied with the patterns of covers for the books which you sent us,* it appears that *which you sent us* relates to *books* and not to *covers* as was intended. Bearing in mind the above-mentioned rule, we must redraft the sentence to read : *We are quite satisfied with the patterns of covers which you sent us for the books.*

The word "only" is a frequent source of error. For instance, notice that each of the following sentences, though containing the same words, has a different meaning—

(*a*) *We only can make an offer for* 100 *gross.*
(*b*) *We can only make an offer for* 100 *gross.*
(*c*) *We can make an offer for only* 100 *gross.*

In (*a*) the meaning is that we and no one else can make an offer; (*b*) means that all we can do is to make an offer; while (*c*) means that we can make an offer for 100 gross and no more. As a general rule the word "only" should immediately precede the word or words to which it relates.

| RIGHT. | WRONG. |
|---|---|
| *You must send me either A or B.* | *You must either send me A or B.* |
| *We require* (a) *some shirtings,* (b) *some flannel, and* (c) *a large supply of cotton goods.* | *We require* (a) *some shirtings,* (b) *flannel,* (c) *and a large supply of cotton goods.* |
| *You must remit either by cheque or by postal order.* | *You must either remit by cheque or by postal order.* |
| *You must remit by either cheque or postal order.* | *You must remit either by cheque or postal order.* |
| *We have received neither the invoice nor the statement.* | *We have neither received the invoice nor the statement.* |

Other sentences containing words in their correct order, with the incorrect order which is frequently met with, are given in the previous column.

When you wish to compare or contrast two things, you must be careful to use the right words if you are to be a good writer of business lettters. For instance, you can say that *neither the shirtings nor* (NOT *or*) *the flannels are satisfactory ;* and *We have not either A brand or* (NOT *nor*) *B brand in stock.*

## Synonyms.

A good business-letter writer is proficient in the use of synonymous words and phrases. He is never "at a loss" for a suitable word. By practice he has acquired a wide vocabulary, and the "dictionary habit" has given him a choice of words and phrases to express his meaning.

Synonyms are most important helps in the composition of business letters. In using synonyms, however, care is necessary in their choice, as some words which are generally considered as having the same meaning are *not* synonymous. One frequently quoted example will suffice here. The words *allow* and *permit,* by many people considered as synonymous, have different meanings, the former signifying that no action will be taken against the proposed course, while to *permit* is to agree to the particular course mentioned. I may *allow* you to cross my field, although such trespass is not *permitted.*

## Spelling and Punctuation.

The business letter must, it need hardly be said, be correctly spelled and properly punctuated. For the former, nothing beats the "dictionary habit" previously mentioned—the constant "looking up" of words in a good English dictionary. The uses of punctuation marks are well known and need not be set out here. The apostrophe seems to give the most trouble, and some typists seem to make a habit of leaving it out altogether. The text-book rule is—

The apostrophe is used to mark the possessive case, to indicate the omission of letters, etc., e.g. *Please send me a copy of "A Girl's Education" and particulars of your book on Girls' Schools. I can't wait long for them.*

Note carefully the difference in such sentences as—

*Her brothers-in-law are in the same office.*
*Her brother-in-law's office is in High Street.*

# CHAPTER V

# PARTICULAR KINDS OF LETTERS

HAVING given the general construction of business letters a fairly full consideration, we must now turn our attention to the writing of particular

kinds of letters. The following are the principal kinds—

*Letters Ordering Goods.* These must specify most carefully the articles required, and contain full directions for forwarding, etc.

*Letters Renewing Orders.* These are mentioned separately, but they should contain all the information given under the previous heading. The directions should be as explicit as in the first case.

*Letters Acknowledging Receipt of Orders.* These should be sent off promptly if they are to give a good impression. Even if the goods are not ready for despatch, the acknowledgment should state that the order is receiving attention and should be sent at once.

*Letters Enclosing Remittances.* These should state, both in words and in figures, the amount enclosed and what it is in payment of.

*Letters Acknowledging Remittances.* These may well repeat the information contained in the above.

*Letters Requesting Special Favours.* These should state at the outset exactly what is required, and the reasons should follow. Needless to say, such letters should be most courteously worded.

*Dunning Letters.* These are letters asking for payment of overdue accounts. In their composition great skill is required if payment is to be obtained without offending the debtor. Such letters are generally written in a series in which the letters get "stronger" in tone as time goes on. Only after several requests for payment should there be any actual threat to put the matter in the hands of the solicitor. (The writing of successful dunning letters is dealt with in Chapter IX of Section 8 on THE FINANCING OF BUSINESS.)

*Letters of Censure.* These must be written only after calm and careful thought. There is much virtue in the advice "sleep on it" when tempted to write such letters.

*Circular Letters.* These are so important that they are being considered in separate chapters. (*See* Chaps. VI and VII.)

Then there are letters of enquiry as to the financial standing of firms, estimates, quotations, etc., and several of the more important classes of letter will now receive our particular attention.

## Status Enquiries.

In many businesses it is absolutely necessary to give credit, and it will thus be seen how important it is to enquire concerning the standing, reputation, character, and financial capacity of those persons or firms who are desirous of having credit facilities extended to them. Trade enquiry agencies will often furnish such information; but enquiries are often addressed to reliable firms of the enquirer's acquaintance in the same town or to the firms whose names are given as references.

It should be distinctly understood that both enquiries and the replies thereto are in strict confidence. A stamped envelope should, of course, be enclosed with every letter of enquiry.

In the composition of the replies to status enquiries, the greatest care should be taken to give strictly accurate information. If definite information cannot be given, this should be frankly stated and the enquirer referred to other likely sources of information.

The following examples will give an idea of the style preferably adopted in letters regarding the status of persons and firms—

## Letter to a Referee.

*Gentlemen,*

*Messrs. Jones Bros., of Downhills Road, Portslade, are desirous of opening an account with us, and have named your firm as a referee. We shall be grateful if you will give us as detailed information as you can of their business standing. Have you known the firm long, have you found them regular and prompt in their payments, and do you consider them worthy of a running credit of £250?*

*We thank you in advance for any information with which you can favour us, and need hardly add that such will be treated as strictly confidential.*

*Thanking you in anticipation of your early reply, and placing our services at your disposal in similar matters,*

*We remain,*
*Yours faithfully,*
*For SIMON SIMONS & SONS, LTD.*
*Fredk. L. Porton,*
*Secretary.*

*Enclo. Stamped env.*

## Reply to Above Letter.

*Dear Sirs,*

*In reply to your enquiry of yesterday's date we beg to inform you that we can give you favourable information about Messrs. Jones Bros. We have done business with this firm for over ten years, and they have our fullest respect and confidence. They have always paid their accounts regularly and promptly, and we should have no hesitation in according them a credit of the amount you mention.*

*We give you this information in strict confidence and without prejudice.*

*Yours faithfully,*
*THOMAS BROWN & SONS, LTD.*

## An Unfavourable Reply.

*Dear Sirs,*

*We are in receipt of your letter of yesterday's date regarding Messrs. Jones Bros.*

*We regret that we cannot give you a very favourable report. The firm opened an account with us three years ago, and, although we had no fault to find with them for the first twelve months or so, we have since had to complain of irregular payments.*

*On more than one occasion we have had to exert considerable pressure in order to obtain settlement of their account. Although the amount is comparatively small, we should ourselves hesitate to give the firm credit for the amount you name.*

*You will understand that this information is given in strict confidence and without prejudice.*

*Yours faithfully,*

*THOMAS BROWN & SONS, LTD.*

## Offers.

In composing a letter containing an offer of certain goods, it will be necessary to have details of the nature of the goods, the quantity, terms of payment, delivery information, packing charges, etc. These should all be mentioned, the letter being drafted with the greatest care. The writer should confine himself to actual facts if customers are to be obtained and retained. (*See also* Chapter VII on SALES LETTERS.)

## General Enquiries.

An enquiry is a small matter as a rule, but much time will be saved if it is perfectly clear. Needless to say it should be courteously worded; if we should like to see a catalogue of office furniture, we can write *Send us your catalogue*—but it is not good business! Far better is it to say *We shall be glad if you will kindly favour us with your catalogue of office furniture.*

An example of a longer letter of enquiry is given below—

*Dear Sirs,*

*Referring to your price list and the sample books of your papers forwarded to us on the 2nd instant, we now write to enquire your present lowest prices for your standard grades of Ledger, French Folio, and Fine Laid Writings.*

*We should especially like to know if you could make us a special quotation for a large quantity of Buff Linen Ledger corresponding exactly in weight, shade and finish to the enclosed sample, size 15 × 19, 20 lbs. per ream of 480 sheets, with special water-mark. Should your quotation be accepted, how soon could you deliver?*

*Yours faithfully,*

## Replies to Enquiries.

These should, of course, cover the whole of the points raised in the letter of enquiry. The following is an example—

*Dear Sir,*

*Enclosed please find some booklets describing the Midland Calculating Machines, as requested in your letter of yesterday's date.*

*It is quite possible that you will have some difficulty in getting just the information you desire from these booklets, but if you will give us full particulars of your requirements we shall be pleased to give you our advice on the matter. We know that it is often difficult for other than users of our Calculators to appreciate fully their use and action.*

*Yours very truly,*

*Enclos. Booklets.*

A further specimen of a reply to an enquiry is given below—

*Dear Sir,*

*We are obliged by your kind enquiry of yesterday's date. We have despatched to you to-day by separate post, a copy of our price list, as requested.*

*Our terms are 5% discount on monthly accounts, if paid before the 10th of the month following delivery, or three months net. All goods are carriage paid, packages being charged but allowed for if returned.*

*We believe that alike in quality and price our goods will compare most favourably with those of our competitors, and after you have examined our price list, we hope you will be in a position to place a trial order with us.*

*Assuring you of our most careful attention to your commands,*

*We are,*
*Yours faithfully,*

## Estimates.

In drafting a letter containing an estimate of the cost of certain material or services, great care is required although an estimate is not a definite undertaking as is a quotation. It is understood that the figures given are approximate only, but as the estimate will very probably be compared with others received from other firms, it is necessary that it should be as accurate as is possible without going into great detail. The following is an example—

*Dear Sirs,*

*We beg to acknowledge, with thanks, the receipt of your enquiry of yesterday's date.*

*We estimate the cost of fitting up your office in accordance with your requirements as follows—*

| | |
|---|---|
| *Supply and fitting of three desks of type A2* | £40 |
| *4 Armchairs, pattern B3* . . . | 20 |
| *8 Chairs, pattern C4* . . . . | 10 |
| *Removing old and fitting new type D7 desk telephone* . . . . . | 6 |
| | £76 |

*If you will be good enough to let us have full details of your requirements, we shall be pleased to let you have a definite quotation.*

*Our catalogue containing particulars of the above-mentioned furniture is enclosed, and if you would like further information we shall be pleased to send a representative to see you.*

*Yours faithfully,*

*Enclo.*

## Quotations.

We have said that a quotation is a definite undertaking. It is an offer to do certain work or supply certain goods for a definite named sum of money. Its compilation, therefore, may necessitate much exact calculation and careful checking, especially if the amount of money involved is considerable. The following is an example of a letter containing a quotation.

*Photo* *Kealeys, Ltd.*

THE GENERAL OFFICE OF MESSRS. T. F. BRISTOW & CO., LTD.

*Dear Sirs,*

*In reference to our representative's call yesterday we beg to quote you £74 10s. 6d. for the work and details specified on the attached and noted in our estimate of the 2nd instant.*

*We are able to guarantee the best workmanship and have no doubt that, should you favour us with your order, we shall be able to carry out the work to your entire satisfaction.*

*Enclo.*

## Orders.

In a letter ordering goods it is necessary to mention quantity, kind, quality, price, packing and delivery instructions. It is much better to give too many details than not enough, for orders that give insufficient particulars are responsible for many delays. It is, therefore, always worth while to see that what is required is sufficiently and exactly described. When sending a repeat order, it is well worth the extra trouble to again give full particulars; "same as before" is liable to lead to delay, especially if a new-comer on the staff of the recipient handles the repeat order. An example of a letter ordering goods is given in Chapter III, while one of a letter sent with a separate order is given below—

*Dear Sirs,*

*We have pleasure in sending you herewith a small trial order for pens, which we trust you will be able to execute so that they may arrive here not later than Wednesday next. This is important, as we find we have almost run out of one or two of the lines ordered, and for which at this season of the year the demand is usually rather brisk.*

*Yours faithfully,*

## Acknowledgment of Orders.

Orders should be acknowledged without delay. Such acknowledgments may take the form of printed forms or post-cards in a large firm, but separate letters may be worth while on occasion. They should express thanks for the order and say that it is receiving attention. Should there be any doubt on any point regarding the exact goods ordered, a request for further information should be included. The following is an example—

*Dear Sirs,*

*We are in receipt of your order of yesterday, for which please accept our best thanks. It will receive our immediate attention.*

*Yours truly,*

## Advice of Execution of Orders.

In advising the execution of an order, the letter should refer to the receipt of the order, its completion and how and when the goods were despatched, the amount of the invoice, and the favour of further orders.

## Letters Acknowledging Receipt of Goods and Making Payment.

It is almost needless to say that it always pays a firm to keep strictly to the terms of payment arranged with the suppliers of their goods. Payments will probably be made on a certain date each month, and will not be enclosed in letters acknowledging the receipt of goods unless the particular order is an isolated one. In the ordinary way of trade, remittances are made by cheques, bills of exchange, postal orders, and (for very small amounts and to make up odd amounts when sending postal orders) postage stamps. Besides mention of the amount enclosed, a letter should state whether cheques, postal order, or bill is sent.

A simple example of a letter enclosing a remittance is as follows—

*Dear Sirs,*

*Enclosed we have pleasure in forwarding you a cheque for £100 10s. 8d. (One hundred pounds Ten shillings and Eightpence) in payment of your invoice for goods received last month (March).*

*Kindly acknowledge receipt.*

*Yours faithfully,*

*Enclo. Cheque.*

An example of a letter acknowledging the receipt of goods and making payment therefor is given below—

*Dear Sirs,*

*We beg to acknowledge receipt of the six gross of Writing Pads, the consignment of which you advised us by your letter of the 29th instant, and which we have found to be quite satisfactory.*

*In payment of your account, we enclose cheque for £35 (Thirty-five pounds), and shall be glad if you will acknowledge its receipt and credit us with the amount.*

*Yours truly,*

*Enclo. Cheque.*

## Acknowledgment of Remittance.

This may take the form of a printed note, with amounts filled in, but (especially in the case of a first order or one of a substantial amount) a special letter is desirable. This should be brief, needing only particulars of the payment and a short paragraph expressing a hope that further orders will follow. An example is given below—

*Dear Sirs,*

*We beg to acknowledge the receipt of your letter of yesterday's date, enclosing a cheque for Thirty-five pounds in settlement of our invoice. Our official receipt is enclosed.*

*We hope that our goods will give you every satisfaction, and that we shall have the pleasure of receiving further orders.*

*Yours faithfully,*

*Enclo. Receipt.*

## Letters Concerning Complaints and Claims.

We now come to the writing of what are at the best very awkward and troublesome letters. Some firms have built up a reputation by their policy of holding that, whatever the complaint, the customer is always right. This may be going somewhat too far, and a course which impresses the customer with the firm's strict honesty and desire to please him, while at the same time putting right the complaint, is the one most advisable to pursue. The writer of a letter in reply to a complaint must bear in mind the fact that the way in which he handles the particular case has a bearing on future business.

Let us, however, first deal with the writing of letters making complaints. These should be perfectly straightforward and state exactly what the complaint is, and a hope that the matter will be put right so that the friendly relations between the firms may continue. The following is a typical example of a short letter of complaint—

*Dear Sirs,*

*The goods advised by you on the 7th instant reached us this morning. We regret to say that on unpacking the box we discovered that eleven copies of the "Gardener's Annual" had scratches on the binding such as to render them quite unfit for sale at our shops. This is unfortunate, as we are requiring them rather urgently.*

*We are returning the damaged books to-day, and shall be pleased to hear from you on the matter at the earliest possible moment.*

*Yours faithfully,*

This letter should be looked into the moment the books are received, or, if these have not arrived on the day following the receipt of the complaint, a reply should at once be sent regretting the necessity for complaint and stating that the matter will have careful attention immediately the damaged books come to hand. Presuming that the books have arrived and are found to be as described in the letter of complaint, a letter similar to the following should be sent—

*Dear Sirs,*

*We regret very much to receive your complaint with reference to the books delivered against your order B679.*

*The damage which you point out was not noticed before the despatch of the box, and it has evidently been caused in transit.*

*We are having another eleven copies of the "Gardener's Annual" sent you immediately, and trust they will be in time to prevent any ill consequences of the delay.*

*Thanking you for pointing out the damage, and assuring you of our endeavour to serve your best interests at all times,*

*We are,*

*Yours faithfully.*

CHAPTER VI

## CIRCULARS AND FORM LETTERS

THE subject of circulars belongs really to advertising or salesmanship, but a few general remarks on their composition will be useful in this section. An American writer has said that the three fundamentals to be observed in the construction of any kind of advertising card or circular are: Make it useful, make it attractive, make it interesting.

### Kinds of Circulars.

Besides the circulars which are sales letters and which will receive our attention in the following chapter, there are a number of other kinds of circulars that are necessary at various times in business. There are, for instance, circulars relating to the establishment, transfer, or taking over of a business, change of address, notifying the admission or retirement of a partner, etc. Speaking generally they conform to the ordinary rules for the composition of business letters, but a few remarks as to what each kind of circular should contain will, no doubt, be helpful.

It should be mentioned that the signature on a circular is generally in facsimile, but when the circularization is but a small one it is well worth the time to sign each copy separately.

### Establishment of a Business.

In a circular announcing the establishment of a business, information should be given on the following points: title of new business, type of business, date of opening, terms of business, proprietor's qualifications, etc. The opening paragraph may very well begin in some such manner as *I beg to inform you that.* The second paragraph should contain the main points, while the concluding paragraph usually draws attention to the signature of the new firm. Typical examples are the following—

*Dear Sir,*

*I have pleasure in informing you that I have to-day opened, at the above address, an Ironmongery Business under the firm name of—*

*HERBERT THOMAS.*

*The thorough knowledge and experience of the trade which I have gained from ten years as employee and manager of prominent ironmongery firms, as well as the possession of funds commensurate with the proposed extent of the business, will enable me to cope with all reasonable requirements.*

*By the conscientious fulfilment of my obligations and by careful attention to orders, it will be my aim to gain the confidence of my business friends.*

*Kindly note my signature, and believe me to be,*

*Yours very truly,*

*Herbert Thomas.*

*Gentlemen,*

*In directing your kind attention to the above address, I venture to solicit the favour of your commands for the purchase of furs at the approaching auctions.*

*My long experience in London, Leipzic, and Moscow has given me a complete and thorough knowledge of the trade in all its branches.*

*I have recently opened here in the commission business and shall devote myself exclusively to the purchase of furs and similar goods for account of my clients, doing no business for my own account so as to have no difficulty in reconciling private interests with clients' interests.*

*My terms are the usual, namely, 2 per cent commission, and cash within ten days of date of invoice; disbursements to client's debit.*

*I am, Gentlemen,*

*Yours respectfully,*

### Admission of Partner.

When a trader takes a partner, or when there is an addition to an existing partnership, it is usual to inform the business friends of the old firm of the change. As a partner has power to bind the partnership by signing the firm name, the signature of the firm, as written by the incoming

*Photo* *Kealeys, Ltd.*

SECTION OF A PACKING DEPARTMENT

(Carltona, Ltd.)

partner, should be included in the letter which is sent out. The following is an example—

*I have pleasure in informing you that, owing to greatly increased business, I have arranged a partnership with Mr. Martin Merton, with whom I shall trade in future as*

*HERBERT THOMAS & CO.*

*Yours faithfully,*
*Herbert Thomas,*
*Now Herbert Thomas & Co.*

*Mr. Merton will sign—*
*Herbert Thomas & Co.*

## Retiring from Business.

In the same way as it is usual to inform persons and firms having business relations with us, of the taking of a partner into the firm, so we must inform them when the time comes for us to retire. There *are* traders (so-called) who "silently fade away," leaving no trace, when they have "traded" on the good nature of their business friends to an uncomfortable limit! But we cannot compose a suitable circular for such! The circulars we have in mind are those which come to be sent out when the trader reaches the time when it is no longer necessary for him to engage in the activities of business life; or, more unfortunately, when he finds that his health will not permit of his continuing in trade. A typical example of such a circular is the following—

*Dear Sirs,*

*I have to inform you that I am retiring from business on the 31st instant, after which date everything connected with my business will be transferred as a going concern to*

*Messrs. H. Wall & Sons,*
*75 Margate Street,*
*Chester.*

*On behalf of this firm I solicit a continuance of the favours you have so kindly extended to me, feeling sure that any order you may place with them will be dealt with carefully and satisfactorily.*

*Thanking you for the confidence with which you have honoured me during so many years,*

*I remain,*
*Yours faithfully,*

## Dissolution of Partnership.

When a partner retires, the firm will notify the fact to their business friends, in some such manner as the following—

*Dear Sir,*

*We have to inform you that our Mr. John Rice retires to-day from this firm, as the new enterprises he has undertaken do not permit him any longer to give us the benefit of his knowledge and experience.*

*This retirement, though we regret it very much, will not in any way change the nature or the course of our business. We hope you will continue to honour us with your confidence, and we assure you that we shall, on our part, neglect nothing to render ourselves worthy of it.*

*Yours faithfully.*

## Form Letters.

Where a considerable number of similar notes are sent out, it is usual to have the invariable portion printed or duplicated and blanks left for the insertion of the wording applicable to the particular case. For instance, there is the notification of the visit of the traveller, the quotation, the order, the letter enclosing remittance, acknowledgment, advice, etc.—each one of these can be the subject of a form if the small number used and the facts of the case do not demand a separate letter. In some cases, the form may be on a post card. Examples of suitable forms are given below—

TRAVELLER'S CALL.

MEMORANDUM.

| From | To |
|---|---|
| THOMAS JONES & CO., LTD., 765 KEW STREET, CHESTER. | _____ _____ _____ |

Our Mr. _____ will have pleasure in calling upon you on Thursday next, the _____ inst, at about _____ o'clock, when we hope it will be convenient for you to spare him a few minutes.

QUOTATION.

| From | To |
|---|---|
| THOMAS JONES & CO., LTD., 765 KEW STREET, CHESTER. | _____ _____ _____ |

Dear Sirs,

In reply to your esteemed enquiry of the _____ we have pleasure in quoting you as follows for the goods mentioned therein—

Terms :
Carriage :
Delivery :

Trusting to be favoured with your order, which shall receive our best attention,

We are,
Yours faithfully,
For THOMAS JONES & CO., LTD.

ORDER.

No. B 7628.

| From | To |
|---|---|
| STEVENSAND & SONS, LTD., 839 NEW ROAD, TOTTENHAM. | _____ _____ _____ |

Please supply the undermentioned goods, and charge the same to our account.

Yours faithfully,
STEVENSAND & SONS, LTD.,
*per* _____

Delivery :
Per
Please quote order No. on invoice.

LETTER ENCLOSING REMITTANCE.

ROUNDWAY WORKS,
WELLINGBOROUGH.

Messrs. Cook & Co., Ltd., have pleasure in enclosing cheque value £
which, with discount,

_____

_____

will balance your account to the end of _____. An acknowledgment in due course will oblige.

CHAPTER VII

## SALES LETTERS

ALL circulars may be said to be sales letters in one respect—they may be the means of making a sale or of helping the continuance of the relations between business men. But the usual meaning of sales letters is: letters written with the idea of securing the attention of the readers, arousing their interest in certain goods described, and

*Photo* *Kealeys, Ltd.*

THE GENERAL OFFICE OF REJAX, LTD.

ACKNOWLEDGMENT.

TOWER COURT,
GRANTHAM.

Messrs. Robbie Bros., Ltd., beg to acknowledge with thanks receipt of your cheque for _____, which has been duly placed to the credit of your account, and for which formal receipt is enclosed herewith.

ADVICE.

157 WHITE LANE,
BIRMINGHAM.

_____

We beg to advise you that we have to-day despatched to
_____ _____ _____
Marked _____ _____ Carriage _____.

For HILTON & CO., LTD.

endeavouring to secure their orders therefor. A sales letter is really a substitute for the traveller or representative, and therefore should be so planned as to lead the recipient through the different steps of making a sale (attention, interest, desire, conviction, action) to securing an order.

### No Standard Form.

There is, of course, no standard form of sales letter—to standardize a form would kill the selling appeal at once. In fact, the more original the sales letter, the better chance has it of being successful—within certain limits, of course. At one time stereotyped forms were much used, but these are useless nowadays. The circular must be "out of the rut" if it is to reach the mind of a

possible buyer before it reaches his waste-paper basket.

## Planning the Sales Letter.

The composition of a sales letter should not be a "rush job"—the class of persons to be appealed to, the particular "selling points," the matters of stationery, printing, etc.; all these should be the subjects of careful study. The actual writing of a sales letter is quite the smaller part of the work to the experienced writer; it is the collection of data, the probing of the needs of the particular case, and the study of "get-up" that take most of his time.

We may divide a sales letter into four parts, the opening paragraph, the introductory portion, the offer, and the closing paragraph; and some advice of each of these parts will now be tendered.

## The Opening Paragraph.

The first few words of a sales letter are of great importance; they must attract attention so that the reader is persuaded to read further. Originality is desirable in the opening paragraph, so that there are few rules that we can lay down here.

"Well begun is half done" applies with great force to a sales letter, as unless the opening paragraph can obtain and hold the attention of the "prospect" it is useless. Sales letters often get this attention by opening with a question, such as: "Are you making the most of your shop window?" "Do you recognize the fact that . . .?" but this plan can be overworked. In fact it is in this opening paragraph that it is especially fatal to make use of hackneyed phrases or methods. Interest must be obtained, as we have said; and to create interest there is nothing to equal originality.

## Introductory Portion.

This should be made as interesting as possible as it is intended to lead up to the offer. Although we are calling it an *introductory* portion, this does not mean that it is a part to be hastily compiled. It is simply introductory to the main point of the sales letter—the offer. It should, therefore, contain information about the article or services which are the subject of the offer, and should be so worded as to quite naturally lead on to the offer.

## The Offer.

The letter should state quite clearly what the offer is; there should be no question of "buying a pig in a poke." The offer should be a special one; it is rarely advisable to make the same offers from time to time. It goes without saying that it should be an attractive one—attractive, that is, to the class of persons which is being circularized.

We have dealt, very briefly, with the main points of the four parts into which we divided the sales letter. Some further remarks are called for, however, on the body of the letter generally.

## Body of Sales Letter.

A successful sales letter, if analysed, will be found to give logical arguments, clear pictures, consistent stories, and plausible explanations. These are four important points to be borne in mind by the writer of a sales letter. He should try to put himself in the place of the receiver of the letter, and endeavour to picture his own thoughts when reading it.

Sales letters should not be general in character; the nearer they come to an individual appeal, the better prospects there are of successful results. A sales letter which "will do for anybody" will as a rule, suit nobody. The attempt to make the letter appear personal by its "get up" is not enough; in fact, very few people nowadays are unacquainted with imitation typewriting, facsimile signatures, personal addresses "fitted in," etc. The "get up" helps, no doubt, but even without much attention to it successful sales letters have been written. One could almost lay the rule down that as long as the actual letter is a really pulling one, written to appeal to the recipient personally, it will not matter if it is typed in black with a purple inside address and a red signature.

It has been said that the best sales letter appeals to both emotions and reason.

## Closing Paragraph.

Finally we must see that an inducement is offered for ordering or buying to-day. There must be nothing to give the idea that to-morrow will be soon enough. The sales letter, in its closing paragraph, should stimulate a reply; and to induce the action it should have a climax, e.g. a brief command or question or suggestion of action. The "thanking you in anticipation" close is not good enough nowadays!

## An Example.

Limitations of space will allow of only one example. The following is a typical sales letter—

*Dear Sir,*

*"To save time is to lengthen life." May we help you to save time?*

*In the world of Commerce to-day it is becoming more and more recognized that efficient and up-to-date mechanical devices are tremendous assets in the conduct of business. The slow and tedious processes with which our fathers laboured find no place in the modern office. The saving of time is the vital need to-day. No firm can afford to permit its staff to spend several hours over work which can be done in as many minutes with the aid of modern appliances.*

*Saving time means saving money, and you*

*cannot ignore the marvels of mechanical skill that are offered to the business world. Therefore we present to you our new loose-leaf Catalogue. This has been issued for the purpose of helping you to realize the immense possibilities of the use of "Office" Labour-Saving Machines and Appliances.*

*There is nothing like seeing the actual machine or appliance in use to show its suitability or otherwise for your office—you will agree with that statement. This brings us to our offer. We offer you one month's free use of any one of the machines listed in our Catalogue so that you may be able to test its capabilities for yourself. Any machine will be sent, carriage paid, on the distinct understanding that there is no obligation to purchase on your part, and if you find, at the end of the month, that you do not want to buy, then send back the machine, carriage forward. But if you find that the machine has been "worthy of its hire," and will kindly forward your cheque in payment, we shall be the better pleased—and so will you.*

*Here is the Catalogue—will you now please look through it, make a note of the machine you would like to have, and post us the enclosed post-card to-day? Your machine will be despatched to-morrow evening; it is already packed and simply needs your name on the address label. May we fill that in?*

*Yours faithfully.*

## General Remarks.

The circularization contemplated in the above letter is evidently not a large one. In such a case it is well worth considering whether the letters should be separately addressed and signed, and posted in sealed envelopes. These are matters which must be decided by each trader for himself, having in mind the circumstances of the particular case. As a general rule it is better to err on the side of spending a little too much than on that of extreme economy. It is not wise to "spoil the ship for a ha'porth of tar."

Much, of course, depends on the class of persons to whom the letters are being sent. If they are a select band of, say, company directors, it will be well for the letters to be separately addressed and signed, and posted by letter post.

## Following Up.

To such a sales letter as we have illustrated there will doubtless be "follow-ups." Great care is necessary in working a follow-up scheme. For one thing there must be an accurate record of the names of the persons to whom the sales letters are sent, and it is very important to record all the replies received. It is most annoying, to say the least, for a person ordering goods on the strength of a sales letter, to afterwards receive a follow up.

Commercial travellers do not consider themselves failures if they fail to sell on a first call; they rely upon future calls for much of their business. In the same way, sales letters need not be written down as failures if they fail to sell at first; sometimes the first "follow-up" clinches the business, sometimes it is the second or the third that secures the order. It is very rarely that a single sales letter is sufficient to develop the maximum sales possibilities. The writer of what he considers to be a first-class sales letter is apt to be extremely disappointed with the results at first.

Sales letter campaigns usually provide for a series of at least three letters, and it cannot too carefully be noted that all these letters should be planned and written at one time. The whole scheme should be completed before the first letter is sent out.

A system of follow-up letters is described in Chapter XV of Section 14 (Some Practical Suggestions for the Shop, Office, and Warehouse) to which reference should be made.

CHAPTER VIII

# FORMS OF ADDRESS

There is often considerable difficulty in deciding upon the proper forms of address of persons of title, etc., and the writer of the present Section is under the impression that a short list of the correct modes of address, salutation, and conclusion of letters, will be found of considerable use to readers of *Business Building*. He makes no apology, therefore, for inserting the following list for purposes of ready reference in writing letters to persons "out of the ordinary." Many of the persons mentioned will, no doubt, be rarely or never within the "ken" of the small man of business, but it has been thought well to give a fairly complete list.

The King. Address—The King's Most Gracious (*or* Excellent) Majesty. Salutation—Sire, *or* May it please your Majesty. Conclusion—I have the honour to remain, Your Majesty's most humble (*or* obedient) Servant.

Members of Royal Family. Address—To His (*or* Her) Royal Highness, Prince (*or* Princess) . . . . Salutation—Your Royal Highness. Conclusion—I have the honour to remain, Your Royal Highness's most humble (*or* obedient) Servant.

Duke. To His Grace the Duke of . . . .—My Lord Duke (*or* Your Grace)—I beg to subscribe myself, Your Grace's most obedient Servant.

Duchess. To Her Grace the Duchess of . . . .—My Lady (*or* Madam)—I beg to subscribe myself, Your Grace's most obedient Servant.

Marquis. To the Most Honourable the Marquis of . . . .—My Lord Marquis—I have the honour to be, Your Lordship's most obedient Servant.

MARCHIONESS. To the Most Honourable the Marchioness of . . . .—My Lady—I have the honour to be, Your Ladyship's most obedient Servant.

EARL. To the Right Honourable the Earl of . . . .—My Lord—I have the honour to remain, My Lord, Your most obedient Servant.

COUNTESS. To the Right Honourable the Countess of . . . .—My Lady—I have the honour to remain, My Lady, Your most obedient Servant.

VISCOUNT OR BARON. To the Right Honourable the Viscount . . . . (*or* To the Right Honourable Lord Viscount)—My Lord—Your Lordship's most obedient Servant.

BARONET OR KNIGHT. To Sir . . . . . ., Bt. (*or* Kt.)—Sir (and first forename)—Your obedient Servant.

LORD MAYOR. To the Right Honourable the Lord Mayor of . . . .—My Lord Mayor—Your obedient Servant.

MAYOR. The Worshipful the Mayor of . . . . . (*or* His Worship the Mayor of . . . . .)—Sir—Your obedient Servant.

ALDERMAN. Mr. Alderman . . . .—Sir—Your obedient Servant.

COUNCILLOR. Mr. Councillor . . . .—Sir—Yours faithfully.

ARCHBISHOP. To the Most Rev. the Lord Archbishop of . . . .—My Lord Archbishop (*or* Your Grace)—I remain, My Lord Archbishop, Your obedient Servant.

BISHOP. The Right Rev. the Lord Bishop of . . . .—My Lord—I remain, My Lord, Your obedient Servant.

CLERGYMAN. The Revd. . . . . (forename and surname)—Sir—Yours faithfully.

MEMBER OF PARLIAMENT. As private gentleman, but with the letters M.P. added *after* Esq., thus—

Thomas Thompson, Esq., M.P.

ARMY (OR NAVAL) OFFICER. As private gentleman, but with the rank prefixed to the name.

MEDICAL DOCTOR. As private gentleman, but with "Dr." prefixed or M.D. added to the name, thus—

Dr. Salter; or A. G. Salter, Esq., M.D.

SECTION 18

# Organization and Routine of a Retail Shop

By C. L. T. Beeching, F.G.I.

## CHAPTER I

## INTRODUCTION

In considering the subject of the shop and its progress towards success, there are certain general principles which apply to shops of every kind, whether it is tea or shirts, boots or furniture, stationery or drapery that is sold. For example, such words as "stock," "turnover," "gross profit," "capital," "margin" and the like, convey ideas common to them all. And prior to all these, covering them, is the word in the title of this section: "organization." In itself vague and indeterminate, yet, as applied to a business, it means the arrangement of all that it is and all that is done in it so that a sure result may be attained. That sure result undoubtedly is *net profit*. Whatever tends to the production of this is good; whatever retards it or diminishes it is bad. Hence the importance of the shopkeeper knowing not only the principles of good organization, but also how to apply them, how to judge their results. In short, the owner of a business must be in command. If he does not rule his affairs, his affairs will rule him and the end, sooner or later, will be disaster.

The plan of this section will bring out and emphasize these points. We shall first consider the finance of shop management, and next, how to manage the stock and the machinery, animate (if we may say so) and inanimate, about which the finance is concerned.

## CHAPTER II

## THE FOUNDATION OF SHOP FINANCE

Now the writer is most familiar with the trade in which he was brought up and educated—that of a grocer and provision dealer. He must, therefore, be pardoned if he draws most of his illustrations from that very widely spread and necessary branch of retail commerce. But the reader, be he of what trade he may, will easily be able to apply the principles illustrated to his own case. So we plunge at once into the consideration of profit—the end, aim, purpose, and object of each and every business of any kind. In doing this, we must continually use and refer to three things. There is: (1) The "margin"—the difference between the cost and selling price of goods; (2) the profit, or net profit (on the turnover); (3) the profit, or interest, on the capital employed in the business.

### Aims and Objects of a Trader.

Now, quite obviously, the first two are only valuable as they lead on to the third, and are realized in it. To illustrate, a man with a good knowledge of the grocery and provision trade, and £1,000, let us say, has obviously capital and the power to work with it at his disposal. If he invests his £1,000 in gilt-edged securities, his return will be at present in the region of 4½ per cent—that is, roughly, £45 per year—and, being income which someone else has earned for him, he will probably (if he is assessable to Income Tax) have to return a certain amount to a paternal Government. But if he wisely determines to invest his £1,000 in a well-chosen business—otherwise, to open for himself—he will expect his capital, brains, and energy to pay him much better. He looks to make enough to live on, and even hopes to add to his capital—slowly, perhaps, at first, surely, nevertheless—and, re-investing such savings in his business, he hopes to see it grow and expand. These are the legitimate aims and objects of a grocer—as, indeed, of any other trader.

### Margin, Profit, and Interest.

Our task is now to investigate the relations of margin, profit, and interest on capital. In doing so, we shall try to look on the trader's ownership of the business as a different thing from the management of it, however the one may influence the other. As the owner, he will receive interest on his capital invested; as the manager, he will receive remuneration for the work he does in his business. The latter, by the way, is usually called "drawings." Incidentally, what is drawn is a draft, and because a great many small and some large shopkeepers do not keep accounts or understand clearly, apparently, the distinction

just made, they draw blindly drafts that are much too large. Hence, in the end they find that, having paid themselves much too well as *managers*, they have not only failed to add to their capital by way of interest on it as *owners*, but have had to make more or less disastrous inroads on it. This, if long continued, will, of course, lead nowhere else than to the Bankruptcy Court.

## An Illustration.

Now we will take a case for discussion. Let us suppose A invests his £1,000 in a small business, and try to investigate his trading and its attendant circumstances.

A lays out his money, in our estimates, on the conservative, or the safe side. It will help us to elucidate the subject, and also possibly provide data for comparison to those who are actually battling along in business of about the size we are envisaging, and under somewhat similar circumstances. A invests his money in taking a small house and shop at £65 per annum gross rent; he spends his £1,000, or part of it, in this way—

| | £ | s. | d |
|---|---|---|---|
| Fittings, Decoration, and Utensils | 250 | – | – |
| Stock | 350 | – | – |
| Incidental "Moving-In" Expenses | 50 | – | – |
| Balance of Cash banked as Working Capital | 350 | – | – |
| | £1,000 | – | – |

The question now arises, what turnover, what margin, and what profit must be achieved as a steady, regular thing, before A can be described as "on his business feet," and with bigger things before him? Here is what appears to be the minimum—

| | £ | s. | d. |
|---|---|---|---|
| Turnover (i.e. value of goods sold)— | | | |
| Per week | 50 | – | – |
| Per year | 2,600 | – | – |
| Margin, 15 per cent of turnover— | | | |
| Per year | 390 | – | – |
| Per week | 7 | 10 | – |

Method of dealing with the margin—

| | *Per week* £ | s. | d. | |
|---|---|---|---|---|
| Rent | 1 | 5 | – | |
| Rates, Water, Gas | 1 | – | – | |
| Assistance | 2 | 5 | – | |
| Sundry Expenses | | 10 | – | |
| Reserve for Repairs and Renewals | | 5 | – | |
| Total | 5 | 5 | – | |
| To A, as Cash Return, for his brains and work (as "Manager" of the business) | 2 | – | – | |
| Interest on Capital (as Owner of the business) | | 5 | – | (net profit) |
| | £7 | 10 | – | |

A's remuneration for his work and brains will really be—

| | *Per week* £ | s. | d. |
|---|---|---|---|
| Cash | 2 | – | – |
| One-third rent, rates, water, and gas | | 15 | – |
| | 2 | 15 | – |

and, in addition, he will add 5s. per week to his capital. This is equivalent to an interest of a little over 1¼ per cent—not very much, as yet, you will say. True, we have endeavoured to look at the first year of A's trading in his new business, and, of course, it takes time to build up a goodwill. If he has been able to achieve an average turnover of £50 per week during his first year he will have no reason to reproach himself. Actually he may have done less during the first three or six months—probably he has—and then will have come in the use of the £350 working capital referred to above. It may have saved him from much embarrassment.

Next, A will have need to live with a certain amount of Spartan simplicity during that first venturesome year, during that period of plain living and hard thinking and working. But this was to be expected. No business can be built up otherwise—we have to build into it bone of our bone and flesh of our flesh, and vigorously restrain any too free a hand with the till. And if, during the early part of the opening year, the turnover has been less than that representing a trade of £50 per week, the latter part of the year should have exceeded that figure in a growing and expanding concern, and this is the hopeful feature about it. As a reward for his vigour, A might hope to be starting his second year doing, let us say, £65 per week, at but little or no greater running expense—at nothing more in the way of rent, rates, and sundries. If so, he will have the margin on the extra £15 to deal with, either entirely as interest on capital, i.e. £2 5s per week, or he can pay himself a little better, and resolve to give a moderate bonus to his assistant. Let us assume, therefore, that he deals with his extra profit or margin thuswise—

| | *Per annum* £ | s. | d. |
|---|---|---|---|
| 45s. multiplied by 52 weeks | 117 | – | – |
| Extra Expenses at 5s. per week | 13 | – | – |
| Extra Remuneration to A himself | 26 | – | – |
| Bonus to Assistant | 10 | – | – |
| Add to Interest on Capital | 68 | – | – |
| | £117 | – | – |

For his second year, therefore, he will be beginning to reap the fruits of his initial courage and enterprise, and his business will now be

valuable as "a going" and paying concern. His interest on capital during the second year will be—

£13 as in first year.
£68 additional in second year.

£81

and his capital will have increased from £1,000 to £1,013. The interest, therefore, will be at the rate of about 8 per cent, which, of course, is a much more presentable and satisfactory figure.

Now all this may look like building "castles in the air." There is nothing intrinsically impossible however, in the figures quoted, and, at any rate, they may form a "basis" for some business philosophizing and for discussion. After all, one cannot write on "business management" without the use of illustrating figures. And, one thing is clear—the great value of increasing turnover by even so much as £15 worth of sales per week, provided the expenses remain as before.

"The little more, and how much it is: the little less, and what worlds away!"

CHAPTER III

## MARGIN, GROSS AND NET PROFIT

MARGIN is the difference between the gross cost and the selling price of goods. The term "gross cost" is emphasized, because the real cost of goods is not always what it appears to be on the surface—it is not what is written down in the manufacturers' catalogue or price list. For example,

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A FINE DISPLAY OF CONFECTIONERY AND FRUIT

if the buyer pays carriage home, that must be calculated as part of the cost. On the other hand, there may be either or both trade discount and cash discount to be deducted. Whilst both carriage on and discount off appear in the accounts, the manager or proprietor, in fixing his selling prices, may not always be careful to take account of them. The container, box, cask, or bag may also be of some slight value. All these factors must be taken account of in fixing the selling price.

### Fixing the Selling Price.

The seller, as an individual, is not by any means always free in this matter. If he were, he would

probably never fail so to fix his selling price that an adequate profit would result. There are many restraining influences at work—some of them good and some bad. With various classes of goods these influences differ. In the case of proprietary goods and staple articles sold as such, for example, there is in each case a differing factor. We must, therefore, try to make a rough analysis of the different divisions of the stock of an ordinary grocer and provision dealer, and note in each case the kind of profit obtainable. The above table is presented for consideration. The grocer, as in our previous chapter, is supposed to be doing a turnover of £50 per week.

ANALYSIS OF CLASSES OF ARTICLES SOLD

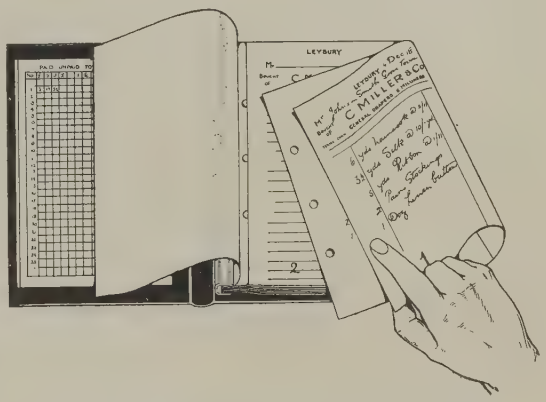
| | *Proportion of trade* | *Rate of margin per cent* | *Margin* | | |
|---|---|---|---|---|---|
| | £ | | £ | *s.* | *d.* |
| Tea, coffee, and cocoa | 8 | 15 | 1 | 4 | – |
| Sugar | 5 | 7 | | 7 | – |
| Various proprietaries (e.g. soaps, infant foods, etc.) | 5 | 12½ | | 12 | 6 |
| Jams, pickles, canned goods, dried fruits | 5 | 20 | 1 | – | – |
| Household sundries | 5 | 25 | 1 | 5 | – |
| Biscuits and confectionery | 3 | 17½ | | 10 | 6 |
| Provisions | 15 | 10 | 1 | 10 | – |
| Other goods | 4 | 20 | | 16 | – |
| Total | £50 | | £7 | 5 | – |

The rate of margin on this analysis of a week's trade will be 14·5 per cent of turnover. Now various deductions can be drawn from this list, which is, of course, conjectural, but fairly representative. The first is that the rate of margin on turnover varies very considerably with different classes of goods—much more so, perhaps, with the grocer and provision dealer than with any other class of trader. Secondly, in a general way, and in most cases, the trader does not know definitely in this manner how the different classes of articles actually pay him. He may set out to make a certain margin on various goods, pricing them accordingly, but the actual result is usually hidden in the general result revealed by stocktaking and the trading account. He is thus not in a position to concentrate his selling activities on the best paying sections. Few realize as they should the large proportion of their turnover which is made up of the sales of articles on which the percentage is a small one.

## Recording All Sales.

Every grocer should take steps to put himself in better command of his business. The system advocated is to give a bill and retain a duplicate of every sale made, just as the drapers and outfitters do, and that whether the sale is for a small amount, such as a reel of cotton or a packet of pins, or a silk dress or a dozen shirts. By this means, a record of all sales, for cash or credit, in detail will be possessed, and the grocer can know exactly for any specified period if any section, or any one line of goods for that matter, is producing its proper margin of gross profit, or the reverse. All he needs to do is to take stock at the beginning of the specified period, calculate the amount of new stock received during the period, extract from his record of sales the amount of sales; take stock at the end of the period; and thus all the elements of the trading account for that particular time or section of goods will be in his possession. Of course, a grocer and provision dealer may not need to do this with all the sections set out above, but in the case of provisions—so subject to waste, to deterioration, to shrinkage, to mistakes in calculating prices, and other such-like accidents—he will do well to adopt the practice suggested, and will find it a marvellous check on his trading. Incidentally, it may prove for a time an eye-opener!

And if the grocer and the draper should give a bill for every sale, whether for cash or credit, the same rule ought certainly to apply in other trades. The furniture dealer, the boot retailer, even the ironmonger can follow the practice to great advantage. It does away with slip-shod method, it gives the proprietor a means of efficient control down to the smallest transactions. And here let it be said that nothing short of *complete* control should satisfy any shopkeeper.




PARAGON SALES DUPLICATE BOOK PUNCHED FOR PARAGON SELF-BINDER

## The Trader's Limitations.

Next it may be asked what freedom or power has the trader in fixing for himself the margin he intends to get? Herein limitations beset him. Some of these are quite obvious, competition being one. He must sell sugar at a price to

correspond with that charged by his neighbours. Proprietary goods have either the prices fixed by the makers, or else custom decrees that but a small profit is possible. Meanwhile, it must be recognized that the trend among manufacturers is to give the trader a sufficient, if not generous, margin.

## "Well Bought is Half Sold."

In other sections, good buying will count for a great deal. In this, knowledge of the goods and of the markets, the times and seasons, etc., will play its part. "Well bought is half sold," was once a proverb generally accepted. Like most proverbs of the "moral universal" type of truth, it does not always follow, but no one can deny that the buying department of a business, large or small, is of very considerable importance. It is often just here where the amateur grocer fails, most miserably.

## Further Considerations.

On the whole, cutting will not be a commendable policy when fixing selling prices. For a struggling man who is seeking to build up a business, it may well be disastrous. *Quality*, on the other hand, is always a good slogan. Looking again at the analysis of classes of articles sold, it is obvious that 15 per cent of turnover on "tea, coffee, and cocoa," will not be margin unless the grocer determines to sell his "own" tea and to push it for all he is worth. Proprietary teas do not seem to provide this margin, or anything like it. And it appears that, in view of the calculations and examples given, any goods which show a less margin than 12½ per cent at least do not contribute their share to the profit, and can scarcely be said to do that much in regard to the expenses. Hence, seeing a well-known proprietary packed tea advertised to the grocer as: "Cost 1s. 10d. per lb., to retail 2s.," we are bound to pause and think. One penny in the shilling—one-twelfth of 100 is equal only to 8⅓ per cent. No! it is not good enough. Another thought is suggested by an advertisement which has just met the eye. It is about a packed oat, quoted as follows: "2-case lots, 24s. 9d.; 5-case lots, 24s.; 25-case lots, 22s. 9d." These are described as revised terms, and the revision is said to increase substantially the margin of profit. These terms will give a percentage ranging from 21·21 on 2-case orders, 25 on 5-case orders, and up to 31·86 on 25-case orders. This, without reckoning a discount of 1¼ per cent for cash in 28 days. Now, mark, there is no complaint about the terms—would that every article sold over the grocer's counter paid as well! The point is that the rate of profit set out in the advertisement is based on percentage of *cost*, the trade custom being to reckon percentages on *return* or selling price.

## Profits on Cost and on Return.

Here is the difference set out in tabular form—

| | *Cost* | *Selling* | *Per cent on cost* | *Per cent on return* |
|---|---|---|---|---|
| 2-case lots | 24s. 9d. | 30s. | 21·21 | 17·5 |
| 5-case lots | 24s. 0d. | 30s. | 25 | 20·0 |
| 25-case lots | 22s. 9d. | 30s. | 31·86 | 24·16 |

The above is used as an illustration of the fact that the trader should be thoroughly well acquainted with the difference, the considerable difference, there is between percentage based on cost and percentage based on selling prices. Obviously, he who takes 15 per cent of the selling price, adds it thereto, and calls it "15 per cent profit," will find that only 13 per cent of his total turnover is margin. Thus, an article costing 20s. and sold at 23s. will yield 15 per cent on cost, but the yield on return will be only 13 per cent and a very small fraction. This 2 per cent of turnover may mean all the difference between a profit and a loss in the long run. So we repeat it is well to know what one is doing in the matter of profits—and losses!

CHAPTER IV

# CALCULATION OF PERCENTAGE OF PROFIT

If an article is bought, let us say, for 5s. and sold for 10s., the profit may be described as 100 per cent on the *cost*, but it is only 50 per cent of the return, which is, of course, the *selling* price.

## A Useful Table.

The following table shows the percentage of the cost which must be added to the cost price in order to make a given percentage of profit on the sale—

| *Add to cost price per cent* | *To make on selling price per cent* | *Add to cost price per cent* | *To make on selling price per cent* |
|---|---|---|---|
| 5 | 4¾ | 31·55 | 24 |
| 7½ | 7 | (*d*) **33·33** | **25** |
| (*a*) **10** | 9 | 35 | 26 |
| 11·11 | 10 | 37·5 | 27½ |
| 12·36 | 11 | 40 | 28½ |
| 12½ | 11⅛ | 42·86 | 30 |
| 13·63 | 12 | 45 | 31 |
| 14·94 | 13 | 47 | 32 |
| 16·28 | 14 | (*e*) **50** | **33½** |
| 16·66 | 14¼ | 53·85 | 35 |
| **17·65** | **15** | 55 | 35½ |
| 19·05 | 16 | 60 | 37½ |
| (*b*) **20** | **16⅔** | 65 | 39½ |
| 20·49 | 17 | 66·66 | 40 |
| 21·96 | 18 | 70 | 41 |
| 23·46 | 19 | 75 | 42¾ |
| (*c*) **25** | **20** | 80 | 44½ |
| 26·58 | 21 | 85 | 46 |
| 28·21 | 22 | 90 | 47½ |
| 29·88 | 23 | 100 | 50 |

Notes on Above Table

The most useful figures in the above columns are those printed in heavier type than the rest. In the case of (*a*) one-tenth of the cost added thereto produces a profit of

9 per cent of the return; (*b*) one-fifth of the cost added thereto produces a profit of 16⅔ per cent of the return; (*c*) one-fourth of the cost added to the return produces a profit of 20 per cent, or one-fifth of the return; (*d*) one-third of the cost added thereto produces a profit of 25 per cent, or one-fourth of the return; (*e*) one-half of the cost added thereto produces a profit of 33⅓ per cent, or one-third of the return.

## Some Important Calculations.

The following rules for calculating percentage of profit, and interest and discount, with the worked examples, will no doubt be of interest and value—

(*a*) *To find the selling price of any goods in order to realize a given percentage of gross profit on return:*

RULE.—Multiply the cost price by 100 and divide result by the difference between 100 and the percentage of profit required.

EXAMPLE I.

Jam costs 17s. per dozen pots. At what price per dozen and per jar must it be sold to realize 15 per cent profit on the return?

Cost 17s. Profit required 15 per cent.

$$\frac{17 \times 100}{100 - 15} = \frac{1700}{85} = 20\text{s. selling price, or 1s. 8d. per jar.}$$

EXAMPLE II.

Rice costs 25s. per cwt. At what price per cwt. and per lb. must it be sold to realize 20 per cent gross profit on the return?

Cost 25s. Profit required 20 per cent.

$$\frac{25 \times 100}{100 - 20} = \frac{2500}{80} = 31\tfrac{1}{4}\text{s.} = 31\text{s. 3d. per cwt.}$$

31s. 3d. = 3¼d. per lb. to nearest farthing.

or, per lb. divide by 12

112)375(3d.
336
39
4

112)156(1 farthing
112
44

(*b*) *To find the percentage of gross profit on return being made at any selling price:*

RULE.—Multiply the profit by 100 and divide by selling price.

EXAMPLE I.

Tea costs 2s. 6d. per lb. (duty and carriage paid) and is sold at 3s., what is the profit on return?

Profit is 6d. per lb.

$$\frac{100 \times 6}{36} = \frac{600}{36} = \frac{100}{6} = \frac{50}{3} = 16\tfrac{2}{3}\text{ per cent.}$$

EXAMPLE II.

Biscuits cost 112s. per cwt. and are sold at 1s. 4d., what is the gross profit on return?

Cost is 1s. Profit is 4d. per lb.

$$\frac{4 \times 100}{16} = \frac{400}{16} = 25\text{ per cent.}$$

(*c*) *To find simple interest or discount:*

RULE.—Multiply the principal by the rate per cent and by the time, and divide by 100.

(The *principal* is the amount on which the interest or discount is to be calculated.)

EXAMPLE I.

Find the interest on £175 at 5 per cent per annum for three years.

£175
5 rate
875
3 time

Divide by 100)2625

$$£26\tfrac{25}{100} = £26\tfrac{1}{4} = £26\text{ 5s.}$$ *Answer.*

EXAMPLE II.

Find the interest on £200 at 3 per cent per annum from 26th January to 3rd June, 19—.

*Time equal*: 128 days = $\frac{128}{365}$ of a year.

| | | |
|---|---|---|
| Days in Jan. | 5 | |
| Feb. | 28 | |
| Mar. | 31 | |
| Apr. | 30 | |
| May | 31 | |
| June | 3 | |
| | 128 days | |

$$\frac{200}{1} \times \frac{128}{365} \times \frac{3}{1} \times \frac{1}{100} = \frac{768}{365}\text{ £}$$

365)768(£2
730
38
20

760(2s.
730
30
12

360(1d.
365

*Answer*—£2 2s. 1d. (to nearest farthing).

CHAPTER V

# ANALYSIS OF TRADING RESULTS

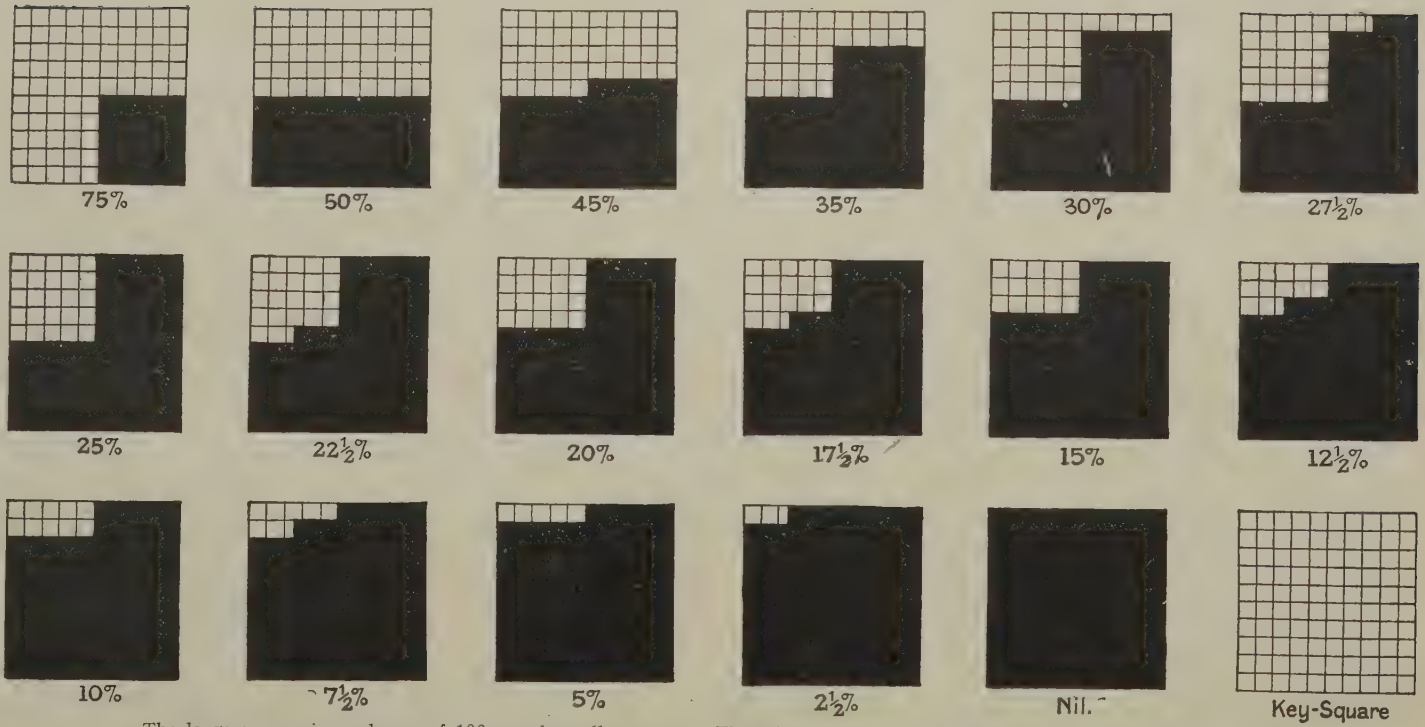
THE system which has been advocated of giving a bill for every sale has its values besides making it possible for the proprietor to analyse his total turnover—if he likes to take the trouble—thereby finding out exactly the rates of profit made on each and every article when he wishes so to investigate. One of its other advantages is as a guide to the selling side of the business, which, as all will allow, is of no mean importance.

## Tea, Coffee, and Cocoa.

For instance, there are but few grocers nowadays who are satisfied with the trade they are doing in those staple lines of the business—tea, coffee, and cocoa, to mention them in their usual order of importance. The trade in these three lines ought to bear a good proportion to the total

PERCENTAGE OF PROFIT ON RETURNS (SELLING PRICE)

Graphically depicted by C. L. T. Beeching, F.G.I.




The large square is made up of 100 equal small squares. The whole square represents a unit sale = 100 : of this the portion left white represents the profit at varying percentages of the sale price : the black portion represents the cost price. Showing also that 100% profit on *sale price* can only be had if the goods cost nothing !

business done, and any trader where this is not the case should bring his efforts to bear to improve matters. But first he must know exactly how things stand, just as the physician needs to know all the facts and symptoms before he can safely apply the remedies. Now, if the grocer is in the position to isolate, so to speak, his tea, coffee, and cocoa department for the purpose of analysis, he can find out for himself these vital facts—

(*a*) Amount of trade done in a chosen period.

(*b*) Proportion of trade done in each of the three items among themselves.

(*c*) Amount of turnover in these items relative to the total business done.

(*d*) Exact gross margin or profit realized by the three.

No doubt it will be said the grocer can get a rough idea from his purchases book of some of this information. Very true, it will be a *rough* idea. But in the science of business we cannot be content merely with rough ideas, conjectures, and estimates. We cannot base certain results on uncertain, vague, and conjectural data. There has been too much of this kind of business practice in the past; there is too much going on now.

## Suggestions for Improving Sales.

Let us suppose that the figures relating to the sale of tea are anything but what they should be (*a*) as regards amount sold, (*b*) as regards margin made. The first suggestion will be that more prominence should be given to this article, which, after all, is used by every family. The further suggestion that will at once leap to the mind's surface is to study carefully the orders received during a certain period from regular customers, with the object of finding out how many of them regularly buy their tea from this shop. If it is found that most, or many, of them do not, there must have been something wrong with the style and type of teas offered hitherto, and a thorough investigation of these will obviously be called for. Herein the grocer may not have sufficient expert knowledge of teas to form an independent opinion, and, in any case, "no man is a good judge in his own cause," so he will be well advised, perhaps, to call in an expert.

Comparison should be made with the teas sold in competition by other concerns in the vicinity, not only as regards value, but as to style of tea, particular flavour, and liquoring-out characteristics. Then there may be some fault in the grocer's method of handling his tea. Does he keep it too long? Is it stored in an unsuitable place or in improper receptacles? Is it received in good condition? Is it sent out in suitable bags or papers?

The scientific way is to look into all factors which may affect the sales of the tea, even though some may seem on the surface to be but trifling. The discovery of faults or negligence, whether in the tea or concerning it, may suggest remedies, which, when applied, will mean all the difference.

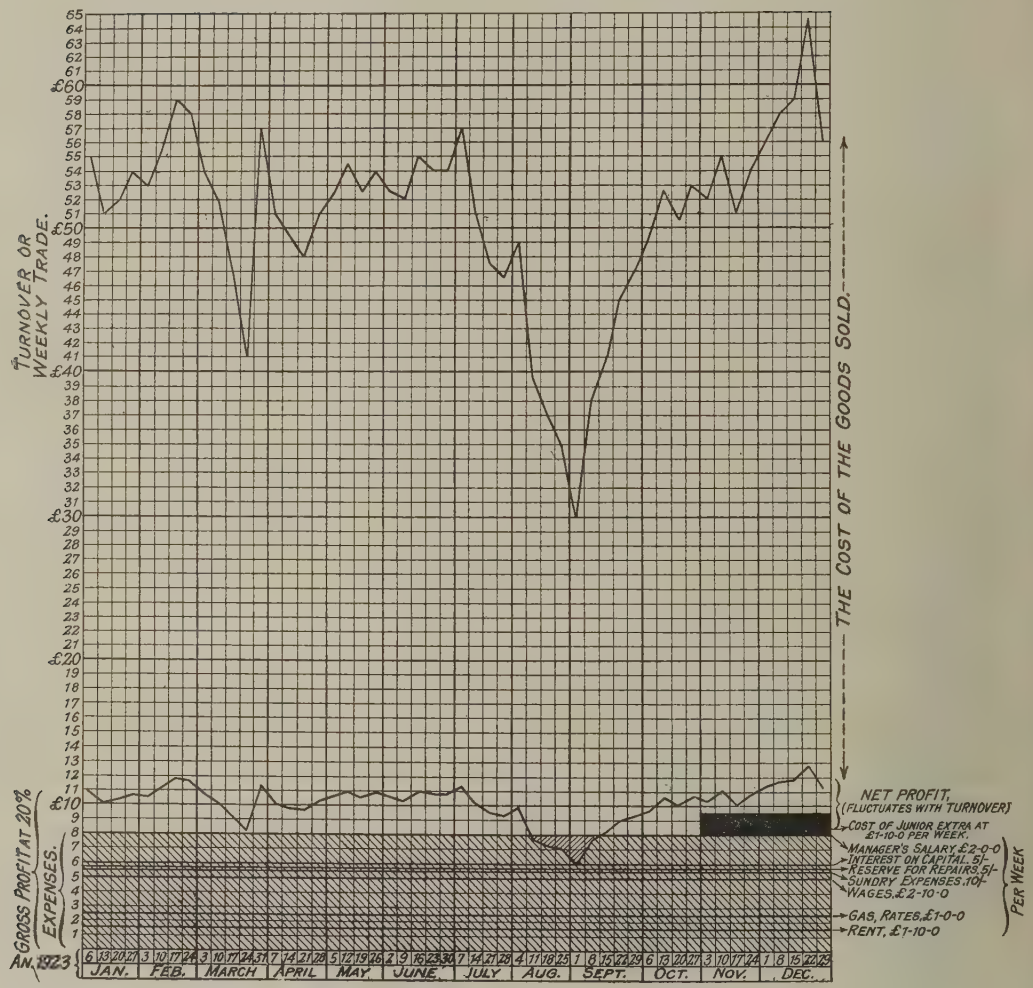
And probably the grocer will discover that he has not had enough faith in his tea himself—a first essential of being enthusiastic about it. For it is from enthusiasm that positive pushing will be derived, such as effective and attractive window displays, an eye-compelling poster, a leaflet which will be read and not thrown away, the sending of small samples with an appropriate letter to those customers who have been discovered from the general investigation to be coming into "our" shop for most things, but evidently going elsewhere for their tea. Get the tea right, and then, when you are certain it is right, go for individuals first. This is to follow a common-sense method, which should surely have results. Of course, it is but an example of what is being here advocated—attention to detail based on accurate facts, and that every grocer should be in a position to make the most exact analysis of his trading. If a certain department is not bearing its share of the profits, again why? These are, in the main, the problems which confront the grocer from time to time, and investigation will help to solve them, especially if exact figures can be obtained.

## Value of Sales Record.

Also that little bill made for every transaction, with its duplicate in the office, will be an immense help in other ways; as, for instance, in checking waste, and possibly even dishonesty and peculation. A grocer may suspect that certain articles are systematically being taken in an underhand way, and yet have no proof. Generally speaking, it would be difficult even to prove that such was the case, let alone bring it home to any individual. With the help of the duplicate record of every article sold during a certain period, it could easily be convincingly shown that some articles of stock were unaccounted for, if so be that irregularities in that particular line had taken place. Thus, the system of a bill for every purchase, with a duplicate kept, must be in the nature of a check on dishonesty of a generally deterrent kind. Just as the efficient and careful system of keeping the cash as distinct from the old, bad, open till, which was a premium on theft, removes one temptation many degrees further away, so does the bill for every purchase remove another. And, while grocers' staffs are generally scrupulously faithful and honest, there are black sheep in every fold (as the very large majority of white sheep would be the first to admit and deplore); and, in the few cases of dishonesty which exist, there is not much doubt that its subject is goods rather than cash. Hence, a check of some kind on the outgoings of goods is parallel and analogous to the

## A GROCER'S TRADE AND EXPENSES

GRAPHICALLY DEPICTED BY C. L. T. BEECHING, F.G.I.




### NOTES ON THE GRAPHICAL REPRESENTATION OF A GROCER'S TRADE AND EXPENSES.

1. The trade of a year is taken for presentation. Each square represents the return of one pound sterling per week. Thus the vertical column over 6 January shows that a trade of £55 was done during the week ending on that day. The wavy line at top of the diagram consequently shows the ups and downs of trade during the year.

2. At the bottom of the diagram the main expenses are shown to be constant or an average for each week depicted by straight lines horizontally. For example, rent is 30s. per week, and its "graph" is horizontal because constant. The same applies to other expenses.

3. The wavy line near the bottom of the diagram represents profit on turnover at an average, in the example, of 20 per cent of the same. It fluctuates with the turnover.

4. The hatching (shading) of the expense section is designed to call attention to the *net profit* which naturally varies with the turnover; as shown between the expense section and the wavy profit-line.

5. For the purpose of showing how an increase in expense eats into the net profit, it has been shown that for the anticipated busy season, November and December, another junior assistant was taken on at £1 10s. per week. The increase in expenses is indicated by the deep black marking on the right of the diagram.

6. For the rest, the diagram explains itself.

check on the incoming of cash, and there seems as much reason for the one as the other.

### Careful Buying Necessary.

If the margin realized on the departmental sales of tea, coffee, and cocoa is not as satisfactory as it should be, an inquisition into costs must be undertaken. Teas and coffees are usually sold at fixed standard prices, e.g. 2s., 2s. 4d., 2s. 8d., and 3s. for tea. The method is to buy for sale at grocer in his effort to meet competition, to increase his tea sales, and to sell at popular prices, whilst securing the required margin.

Coffee, again, as one of the triad of beverages, demands a really interested and intelligent management if it is to do its proper share of pulling in the general result. The principles herein set forth apply to many different "lines," and it is by individual attention to each and all that a good and paying business is built up and expanded.

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A Well-arranged Grocery Interior

these prices, and not alter them for any but violent fluctuations of the market. Where the grocer blends his own teas, and but few, it seems, now do so, originals will have to be chosen to pay a profit when blended to meet all the requirements of quality. Hence, close and careful buying will alone meet the case. Who shall say that skill and knowledge are not needed here, and that anyone but a trained grocer can cope with the situation?

In the large majority of cases, where teas already blended are bought, it will be essential to pit one house against the other, until a wholesaler is found who will whole-heartedly support the

## CHAPTER VI

## BUYING AND OVER-BUYING

Hitherto, we have been dwelling on that important matter of price-fixing with the adequate margin of profit before us, and not, as yet, coming to the details of daily management. Now, just as when stocktaking times come near, the trader reduces his carrying to the barest minimum, so it often happens that afterwards he loads his shop up too lavishly with stock. It is bad business to hold more stock than the amount of

turnover really warrants. All goods sold by the grocer, speaking generally, are better handled in a fresh condition. What this is depends, of course, on the particular class of goods.

## Relation of Stock to Turnover.

To illustrate the point, we will instance some details, previously discussing what should be the average relation of stock to turnover. On the whole, it would seem that from four to six weeks' stock should be sufficient. We are not in the days when the grocer bought enough butter or cheese in the autumn to last him well on the way to the next spring or early summer. Nowadays, but few grocers hold large stocks of tea in originals, because only when blending their own teas is it necessary to do so. Hence, getting goods on the open market often, and in small quantities, he should be able to manage a trade of, say, £100 per week on a stock of £450 or £500 in value. This will be larger at such times as just before Christmas, and smaller (indeed, at its lowest) just before stock-taking. Circumstances alter cases, and no hard and fast rule can be laid down, but there seems to be reason for the contention just advanced.

## Avoiding Excessive Stocking.

Now let us consider, in detail, some methods of buying, whereby excessive stocking may be avoided. Take biscuits, for instance, which, being highly perishable, must be sold fresh and crisp, if customers are not to be disappointed and disgusted. Another reason for care is the great variety of different kinds, so that hardly any grocer stocks anything like every sort sold by a single manufacturer. Biscuits should be ordered every week, or every fortnight at least. An assistant should be given charge of the stock, and his duty should be, on the Monday, let us say, to take stock roughly on ruled sheets of foolscap, in some such fashion as this—

| *Kinds* | 11*th Sept.* | | 18*th Sept.* | | 25*th Sept.* | |
|---|---|---|---|---|---|---|
| Osborne | 1 | 2 | 2 | 1 | – | 2 |
| Cream Cracker | 4 | – | 1 | 4 | 2 | 3 |
| Oaten | 1 | – | ½ | 1 | – | 1 |
| Mixed | 2 | 1 | 1 | 2 | 1 | 2 |

The first column under each date is for the number of unopened tins in stock, the second for the number of each kind ordered. By this it will be easy to note such varieties as are not selling well, and then these may be shown, or otherwise given a chance, and if they have clearly ceased to appeal to the public they can be dropped out of stock altogether. Further, the system will act as a check on over-buying—very valuable in the case of some men—and, on the other hand, will help the shop to avoid being out of stock. For there is nothing more harmful to trade than having to refuse goods which are asked for, with the excuse: "They are expected in to-morrow," or some such apology. New lines which are tried can be added at the foot of the list, and their performance can be watched from week to week, and if they do not catch on, can be eliminated from stock.

The same system can easily be applied to jams, pickles, sauces, soaps, and other kinds of goods as the need may suggest. Likewise, on the day before the periodical call of "our representative" as per advice duly received, the stock of his particular line should be taken, and from the result an order can be compiled ready for him. This is much better than waiting until he is actually in the shop, when you may be busy with customers and unable to spare the time to look out what you really do require. This way, orders are given blindly and in the dark, and you find yourself landed, through your own fault, with more sauce, or marmalade, or potted meats, than there was any occasion for.

## Keeping Up the Stock.

A method by which "out of stock" may be avoided, too, is to have a "want" book hung up in a convenient place behind the counter. Herein it will be the duty of each assistant to note down any goods of which he sees you are running short, not waiting until the last pound, or bottle, or packet has been served before he does it. If the line is rapidly disappearing and there is always a constant demand for it, the salesman should report to the buyer at once, so that a fresh supply may be specially ordered for immediate delivery.

## Seasonal Goods.

What applies to ordinary routine can be extended to particular times and seasons. For example, the orders given for such seasonable goods as Christmas crackers, fancy chocolates and fruits, and all the delicacies which help to swell the turnover (and profits, too, if they have been handled judiciously), should be based on the trade done last season, with a careful estimate of prevailing conditions of trade and the prospects of a good or bad season. These data, as guides to the buying, can be ascertained either from the invoice files of a year ago, or from notes of orders then given in a special note-book which was kept for the purpose, always with the light of memory as to the way such-and-such a line moved, or stuck tight, to illuminate the situation. For it is distinctly bad business to over-buy seasonal goods, which, when the short time of their ephemeral popularity wanes and passes, are left on hand, and have to be drastically "reduced to clear," or become stale and unsaleable altogether.

A dozen of chocolates which sell at 3s. 6d. the box, let us say, have cost 2s. 10d. each net. If all are cleared, the gross profit on return will be a little over 19 per cent. Suppose one box is left, or spoiled (or lost, stolen or strayed, for that matter), and becomes a total loss, what is the

gross profit or margin then? On the whole transaction in this case—

| | s. | d. |
|---|---|---|
| Return (11 boxes) at 3s. 6d. | 38 | 6 |
| Cost (12 boxes) at 2s. 10d. | 34 | – |
| Margin | 4 | 6 |
| Margin per cent | 13·2 | |

So the loss of one box means the loss of 6 per cent of the margin, and if two boxes of the dozen are total loss, the margin has well-nigh disappeared. The same line of reasoning applies to the results of all waste and carelessness, to breakages, and to goods which deteriorate and must be thrown away, or, at best, knocked out at a big reduction.

### What Over-buying Does.

Wherefore, be it known to all unsystematic and careless buyers that over-stocking has this disadvantage in the first place, that it tends directly to reduce the gross margin, which, seeing that fixed charges are inexorable and care nothing for this, must be ultimately borne by the net, or real profit. Secondly, over-buying locks up capital quite unnecessarily, and may easily lead to financial embarrassment and the weakening of that credit which is inseparable from the good name of the business. Thirdly, and connected with the previous truth, is the fact that it will tend to spoil the chance of getting full discounts and the lowest prices otherwise. What is meant, is that if capital is locked up in stock, and the bank denuded of ready cash, because heavy buying must be met by heavy payments, the time will come when the monthly accounts will not all be able to be met on the usual settling days. The wholesale houses do not love the trader whose cheques are late in coming to hand!

## CHAPTER VII

## SOME FURTHER POINTS ON BUYING

Some remarks on buying in the grocery departments have been offered for consideration, and over-buying deprecated. For in sooth, the goods of the grocer are, in the main, of a perishable kind. Once they are in the shop, they are of less value than before they arrived—unless, of course, the market rises, as it did in the early days of the war. Since we began the struggle with peace, the tendency has been very much in the other direction.

### Speculation.

There is a considerable difference between buying and speculating. The former, when carried out scientifically, is a necessary perpetual process which should be a safe one. The latter may easily spell anxiety and loss, and even eventual disaster. Stocking a new thing is sometimes in the nature of a speculation. Nowadays, the maker who puts on the market a new custard powder, boot polish, or soap, backs it up with more or less extensive advertising, and so creates a trade for the grocer to meet. Even so, the new thing should be stocked warily at first, and those tempting extra 5, or even 10 per cents, in the way of discount, should not be yielded to at the outset. A new article, given also the advertising, is not infallibly certain of catching on with the public. A grocer is rarely over-stocked with the staple articles of commerce—tea, coffee, sugar, jams, and such-like goods which everybody must have. It is more often that his shelves and back-shop will be lumbered up with comparatively unknown boot polishes (which, by the way, soon deteriorate), toilet soaps, pudding powders, canned and potted meats, and odds and ends of articles which will not move. It is at stocktaking that such old acquaintances turn up—each time less smiling than the last.

### Clearance Lines.

Now, the better way is not to wait to note their presence after stocktaking, when they are soon forgotten again and remain undisturbed in their dust-collecting obscurity, but a few weeks before stocktaking, to overhaul the odd corners of shop and warehouse. Note the goods which will not move, and bring them forward for a knock-out at reduced prices. A basket or two piled with them, with a special ticket, "Stocktaking Clearance Line," and the price; a little attention on the part of the salesmen, and the old "shopkeepers" should move off. All this, provided the goods are in a saleable condition and would not prove absolutely useless when the customer had got them home. Should they be quite useless, ruthless destruction rather than any attempt to sell them is the more excellent way. Otherwise the good name of the shop will suffer from what is a penny-wise-and-pound-foolish policy. Good and careful buying should, of course, theoretically never result in any bad or slow-moving stock. But, seeing that the youngest of us is not infallible, and that the oldest of us is no better, that even Homer occasionally nods, the best shop in the world will sometimes accumulate a few "dud" lines. But these need not be cuddled up and retained when once their character is apparent. The first loss is the best, and their room is better than their company.

### Provisions.

On the provision side, care in buying is equally and apparently necessary. The cautions in this case are somewhat different and hinge upon

quality, about which the buyer must continually assure himself. And in the matters of tea and coffee, the same caution especially applies. The grocer who can please his customers with tea, coffee, butter, cheese, and bacon is in the strongest possible position. Get and keep these right, and very much has been done to create a backbone for the business. Tea and coffee are capable of having a character of their own, different from that of the tea and coffee sold elsewhere by competitors. A shop can get a reputation for selling always a Cheddar or Gorgonzola cheese of a specially good quality. Its butter may always be absolutely relied on for sweetness and rich flavour. Its bacon may be mild, clean, well-selected. Now, to ensure constant supplies of all these goods, as there should be, eternal vigilance and real interest on the part of the buyer are more than essential, if that were possible. It is a matter of studying the goods, of knowing the markets, even of ransacking the sources of supply.

## Visiting the Warehouse.

But, it may be urged, the man in a small way of business cannot spend the time on going to town weekly to buy. He may not be able to make so regular and frequent a visit to the markets as the bigger man, but even the smallest trader ought to go to the warehouse sometimes, for it is an excellent custom to talk over one's trade with the supplier. In the provision trade the heads of departments, the salesmen, even the directors themselves, are always ready to discuss the goods and their adaptability to a man's own class of trade, with the man himself. And it is good to be shown into the drying-room, and to have one's pick of the

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A Small but Attractive Frontage

fresh, honey-coloured, fragrant sides, as they hang there, virgin and untouched by hand. The dealer can also make any complaints he may have, direct to headquarters.

The one essential thing (there are others, of course) in any trade is to ensure a regular supply of goods which shall be exactly suited to its requirements. No trouble is too great to take in this direction. It is worth while studying even minutely the goods and the customers, and the relation of the one to the other, and to base the most careful selecting and buying of goods on this foundation.

Then, coming to the quantities to be bought on the provision side: here, the supplies should be frequently renewed. In these days of mild-cured bacon, a quick sale is necessary. Butter, obviously, is for quick turnover only. Cheese may improve by storing, providing (*a*) it is new when received, and of a make which is meant to improve as time goes on—for example, September Canadians; and (*b*) it is stored in a proper place, and well looked after whilst keeping, by turning and brushing off, and also by maintaining the temperature at from 55° to 60° F.

### Weekly Stocktaking.

The weekly stocktaking on the provision side is the best guide to buying requirements, and weekly buying should be the rule with everything but cheese. Aim at having as much as possible of the cut bits of bacon cleared up by Saturday closing time, and let not much cut cheese, especially in small pieces, be left over. Then stocktaking will be easier. Cheeses in store can each be marked with the weight, and this can be read off by the stocktaker, whilst any butter or margarine in unopened packages can be quickly noted down. With the few pieces to weigh, all the provision stock will soon be written down in the pages of a foolscap book, kept for the purpose, on a left-hand page, leaving the right-hand page for a list of purchases, the daily sales, and the Trading Account for the week, from which the gross profit will easily appear.

Such a book as this will be the very best guide to buying, for it will always show—

(*a*) The amount of stock in each variety at the week-ends.

(*b*) The amount of trade done in each variety of goods during the week.

(*c*) The quantity of fresh goods bought, with the values, to replace sales during any week in the year.

(*d*) The firms from which the goods were bought.

(*e*) If the purchases were entered in detail, the prices paid for each article; or easy reference to the invoices will make this plain.

These are, perhaps, details, but every business is made up of a multitude of details, and none more so than the business of a grocer. And perhaps the fact that the grocer's business consists in a great variety and number of transactions is the foundation of his strength and endurance. A grocer or provision dealer may lose a customer, or make a mistake for once in buying. In so far as it is a loss, or a mistake, it is bad, but, viewed as one small proportion of the total number of customers, or of the buying transactions, it is of comparatively small importance.

## CHAPTER VIII

## CASH TRADE *VERSUS* CREDIT-GIVING

It is difficult to lay down rules for or describe the daily routine of the grocer's shop, for this must necessarily vary largely with the class of business aimed at, in turn dependent on the environment in which the shop is placed. Roughly, shops may be divided into three categories: (*a*) Those which do a ready-money trade only; (*b*) those which in the main cater for a family trade; and (*c*) those which do a business of a mixed kind. The principal consideration, therefore, to begin with is: "Should the trader give credit, and if so, to what extent?" There are not wanting those who argue that groceries and provisions should always be sold for cash over the counter, or on delivery at latest. They have much reason on their side. Groceries, and still more so, provisions, are consumable stores, and no sooner are they in the purchasers' hands than they begin to disappear. In fact, even if credit is rigidly restricted to one week only (which in practice means nearly a fortnight), the goods are consumed generally before they are paid for. Then it is difficult in each and every case to keep to the rule "one week only." Monthly accounts have a way of creeping in. And there is one inevitable accompaniment of giving credit, the greater or less accumulation of bad debts, and this however careful the management may be.

### Credit Means More Clerical Expenses.

Credit also means expenses in clerical work. This can be illustrated very easily. In a turnover of £100 for cash only, there is no writing up of the ledger, no watching of accounts, no making out of weekly bills or pass-books, no posting of cash received on account. Further, there is no capital sunk in the ledger, and no risk of bad debts. On the other hand, suppose a trade of £100 per week is handled in the form of weekly accounts, there is work here to keep one reliable clerk continually employed at least. Now such a clerk will cost a minimum of 45s. or 50s. per week, equal to $2\frac{1}{4}$ or $2\frac{1}{2}$ per cent of this turnover. It is, therefore, quite obvious that in a purely cash business a lower rate of gross profit is possible,

and hence goods can be sold more cheaply, which, in the long or short run, is for the consumers' benefit.

## Necessity for Credit.

On the other hand, there are certain classes of the community who, being obliged to give credit, are almost forced to get credit in return. One might instance people with fixed incomes, paid by way of salary, or out of the Funds, monthly or even quarterly. Physicians, for example, have to give very long credit—for the last man to be paid is generally the doctor, just as he is the first man needed when something serious is the matter. So whilst this state of things exists, no doubt there will be room and necessity for the trader (in particular the grocer) prepared to supply goods on a credit system. Then, again, the housewife at the head of a considerable establishment finds it very inconvenient to pay for every purchase at some shops as it is made. Such is the variety of articles sold by the grocer that a large family customer will be sending in for something or other several times a day, and the account made up once a week is a great saver of time and trouble. The general deduction is that there will always be room for the credit-giving family grocer, in spite of the efforts made during the war to reduce the business universally to a cash basis. And, as a matter of fact, it is just as well that it should be so. The giving of credit wisely and judiciously, the accounts being carefully looked after, is one of the reasons why the single-shop family grocer of old time has still got a future before him. If the customer has a regular weekly account at a certain shop, she is less likely to run here and there to get her butter and cheese, for example, at the "British and Dominions Stores," her tea at "Tiger's," her bacon at "Dudson's," and so forth. She is much less likely to close the connection with Mr. Family Grocer in a hurry, for we all get into grooves, and running along the grooves is by far the line of least resistance, the road of least trouble, and the pleasantest path—so much are we creatures of habit.

## Price and Quality.

But, of course, price is to be considered too, for some people are keen about it, although not all. The strength of the credit-giving shopkeeper will not be so much price as quality. He will, therefore, be wise to keep quiet about the former, and lay emphasis on the latter. For, as we have seen, it is difficult to give credit and compete in price with the multiple shops that do a strictly cash trade. The antithesis, therefore, is: "Quality and service *versus* price."

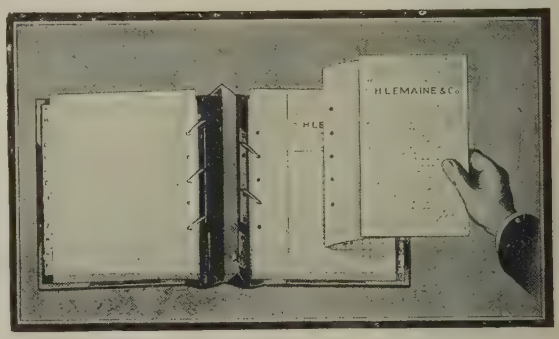
## Delivery Expenses.

In the same connection also must be noted delivery expenses, and possibly also the expenses of collecting orders. Here, again, during the war, the people who were called upon, had their goods regularly delivered, and took credit, were exhorted to go to the shops and carry home their parcels. We have most certainly slipped back into the pre-war condition of things, and in the suburbs the grocer's "young man" may again be seen calling at the houses for orders, and the grocer's delivery van bringing home the goods. As a matter of fact, the average suburban householder, or, rather, his lady, living in a villa from £50 per annum rental and upwards, would not be seen carrying home a large parcel of groceries, or even a small one. So there is one more continued office for the family grocer to perform in the way of service, to set against lower prices perhaps in cash-and-carry shops which compete with him. Possibly the family grocer does not always lay stress enough on his service.

## A Booking System.

But if credit is given and some kind of booking arrangement is necessary, this must be on the simplest possible plan consistent with efficiency. The essentials of such a system are: (*a*) The minimum of writing; (*b*) easiness with which accounts are prepared; (*c*) perfect accuracy; (*d*) the whole of the accounts under constant observation; (*e*) the regular rendering of the accounts with the balances, if any, brought forward.

Comment on each of these requirements seems




Paragon Duplicate Statement System

called for. The old system was to enter goods in detail in the Day Book, or in the roundsman's order books, post them into the ledger in detail, and render the account each week, again in detail. Thus, three writings were involved, with consequent dissipation of energy and multiplication of motion. If two writings can be substituted, or even one, there will be much less occasion for mistakes, which every copying, of course, facilitates. Accordingly, various devices have been invented, the principal of which are the McCaskey

and National Cash Register systems. The essence of these is that a cabinet with slots in alphabetical order is provided, each customer who "books" having a little board to fit into her compartment. On this is clipped the bill of the last order. When the customer comes in to order a second time, the assistant fetches the last bill and brings forward the previous amount on the bill he is now making in duplicate. The cabinet thus takes the place of both Day Book and Sales Ledger. The Lamson Paragon Co., of Canning Town, has also perfected a system whereby two writings only in detail are involved.

In considering the suitability of either system to one's own business, customers' requirements must be taken account of. Many like to have an invoice with the goods, and a detailed account also at the week-end, or, rather, at the beginning of the next week. Even so, only two writings are needed, i.e. the original order taken in the duplicate book, and the account written up in the customer's pass-book or bill. The Sales Ledger will be entered as "To Goods," giving the total amount of each order from the counterfoils of the duplicating books, and the accounts written by a reference back to these.

Perhaps in a large business, a combination of both these systems might be best—a cabinet, that is to say, for the customers' detailed duplicates, each filed under the appropriate name, and the Sales Ledger written up with the totals from these. The cabinet would then be equivalent to a day book.

Whatever system is adopted, the manager, or proprietor, should make it a point of duty to inspect the Sales Ledger in detail each week. It is such an easy matter, by neglect, to allow the amount of customers' accounts owing to grow and grow until it is over-swollen and leading to disaster. In fact, a credit business must always be productive of some anxiety, but then all business will worry a man who will let it worry him!

## Information from Accounts.

There are ways in which a set of ledger accounts may be utilized for promoting more business. When the manager, or proprietor, has opportunity, he can make a close inspection of the accounts to see how the different families are using the shop for the purchase of staple articles; for example, tea or butter. Suppose he ascertains that only half or two-thirds are obtaining their tea from him, he can list the names and addresses of the "delinquents." He can then have some samples neatly made up, and send one to each customer, with a special individual letter (or such as appears to be one) requesting a trial of the sample. If this does not bring orders in a reasonable time, he can follow it with a second letter politely enquiring as to the results of the test. The writer was in conversation with a grocer who had made a big trade in coffee (so much that he had recently retired), and learnt that much of the success was due to the distribution of samples. That is to say, the samples of coffee were not given at random, but accompanied with a letter embodying plain directions for use, with a word or two about the special blend exemplified, the frequent roasting, and other care given to turning out a first-class article.

In fine, the business which caters for the family trade, with which some credit-giving is inseparable, has its features of strength as well as of weakness. Credit is, therefore, not to be condemned off-hand, and without a consideration of all the points involved. Methods applicable to pushing trade in a credit business will not be altogether the same for a cash-and-carry concern. For example, window dressing, with plenty of attractive tickets, might not be so important, whereas in the latter type of business it will be indispensable. Nevertheless, a well-dressed and attractive shop, with staff ever ready to welcome the regular customers, is essential in the family trade, and the assistants and manager himself will realize the necessity of studying the customers' requirements and individuality, so as to be perfectly familiar with all their little likes and dislikes.

CHAPTER IX

# THE FAMILY TRADE—COLLECTION, PREPARATION, AND DESPATCH OF ORDERS

In the previous chapter it has been shown that the family trade is still with us, is likely to continue, and, indeed, is worth cultivating on account of its inherent stability. This kind of trade generally involves the giving of credit, is characterized by a great insistence on the "service" idea, and, in general, needs careful and constant supervision and has a genius all its own.

## Collection of Orders.

Orders are taken either in the shop or out on the round. Dealing with the latter first, the collection of orders used to be, and, indeed, still is, a great function of the assistants. The surrounding "territory" is mapped out into journeys, some of these being done once a week, others twice or thrice, and some families even receive daily calls. A great point is regularity—no customer should ever be disappointed of the usual call at the usual time of the roundsman. Irregularity means, as a rule, a loss of orders, and perhaps, or, rather, almost inevitably, the loss of customers. This practice of calling for orders is a great convenience to the housewife. It was

interrupted in many instances during the war, owing to shortness of staffs, but even then many grocers found it almost indispensable to carry it on, sending girl assistants out, who often, let it be said, made very good canvassers indeed.

## Preparation of Goods.

When the roundsman returns, the thing is to get busy with the preparation of the orders for the doors in duplicating books. On arrival back at the shop, the assistant will proceed to make a list of "roughs," viz., such goods as are not got ready at the counters but in the cellar—hearthstones, bundle wood, large packets of soda, bottled beers, etc. Lists of provisions must also be made for the attention of the assistants in that department. The remaining goods, being groceries and wines, are next prepared at the counter. All

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THE PROVISIONS SECTION OF A MODERN RETAIL STORES

despatch. First of all, there are almost sure to be "earlies"—some goods wanted at once. Now, the rule is that the roundsman must never promise what he cannot perform, for there will be nothing more annoying to the customer than to expect something indispensable, say for lunch or tea, be promised that she shall have it, and then find herself "let down."

Coming to the bulk of the orders, just as the rounds have been arranged and done systematically—in fact, so systematically that the customers know almost to a minute or two the time to expect the call—the deliveries will follow in regular repeated sequence.

We will presume the orders have been taken at this work will, of course, be done in the despatch department, if the business is of such a size and character as to warrant a separate section, with its assistants, for despatch.

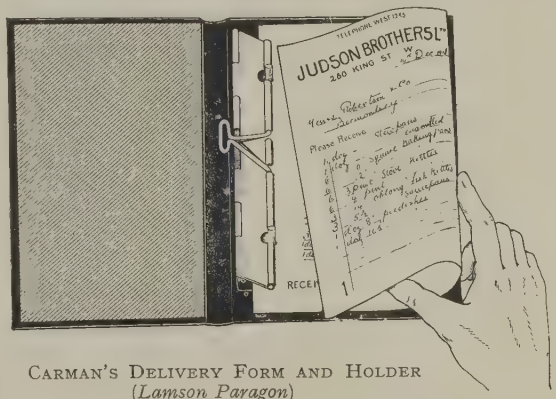
## Packing, Etc.

The goods are assembled and wrapped, if need be, and may either be packed in a parcel or in a basket, if the size and multiplicity of the order warrants this. In that case, the goods should be called from the invoice or bill by one assistant, the one who has prepared them, and checked by another. This way, mistakes as to quantity, size, etc., are less likely to occur. Particular care should be exercised over the packing of biscuits.

Large, square kinds, like cream crackers, or round ones like "Wafer," should be packed into the biscuit bag, otherwise disappointing breakage is likely to occur. When putting the goods into the basket, and also into a parcel, great care must be exercised in not allowing highly-scented goods to travel cheek by jowl; examples are, carbolic soap next to tea or butter, tea and coffee together, two glass jars in proximity, a heavy jar of jam on top of a pound of biscuits, carraway seeds or pepper on top of tea.

We have said packed "in a basket" with reason. Goods are often sent out in a motley and nondescript collection of empty milk or soap or salmon cases, or in cocoa or soap powder boxes, which become soiled by use and were never suitable to begin with, as they smelled perhaps of their contents, and communicated their smell to their new tenants. A degree better than this are empty butter and margarine baskets. Best of all are either boxes or baskets especially made for the purpose. These also will become soiled by constant use, no doubt, but at intervals, and on a fine day, they can be taken into the yard and scrubbed with plenty of soap and water, and then dried in the sun. In summer, a zinc-lined box, with a compartment for ice, should be procured, in which to send out butter and margarine. Nothing is more distasteful to customers than to have these articles arrive in a shapeless, oily mass—and it is more often the case than not that this happens. The smart provision retailer will not only keep his butter and margarine properly in warehouse, cellar, and shop, but send it out properly, otherwise all the care expended in the former direction will be completely nullified and wasted in the latter.

The next step will be to assemble the provisions close at hand with the groceries and to see that the goods from the cellar are handy; and then to call over the goods to the porter or carman, beginning with those of the customer furthest away, and so in order ending with the nearest, to whom, naturally the first delivery will be made. If, as there should be, there is an invoice for each customer (and a "paid" slip for each cash order that is being sent), the carman can have a little cover with a strong clip in it, the invoices and slips can be easily arranged in order of deliveries and put under this clip, and the goods can be easily picked out on arrival by the aid of the document and handed to the customer with it. If the goods have been parcelled or put into an individual basket, a note can be made at the foot or on the back of the invoice; for example: "One parcel—one bottle lime juice, one dozen Whitbread's London stout, hearthstone 3d., wood, 6d., 1 lb. butter." The carman will answer "Right" to each item as it is called, as a sign that he has had the particular thing given into his charge. He will receive instruction as to which orders, if any, are not to be left without the cash on delivery, and any other matters he has to attend to. Should any goods of any orders not be in stock at the time of sending out, it is well to write a short polite note, intimating that it is so, and promising an early delivery; or, better still, get the goods if at all possible. Do not send substitutes for proprietary goods ordered, without an explanation by a letter, which merely offers the article without too much insistence, and certainly without depreciating the kind originally required.




CARMAN'S DELIVERY FORM AND HOLDER
(*Lamson Paragon*)

This is, we venture to think, only business good manners.

## Returned Empties, Etc.

A word about the return of empties, and of goods also; the carman must be trained to give in at once, on his arrival from off the round, an account of these to the despatch hand or other assistant, who will check them and enter them as credit to each customer in the returns book kept for the purpose. All cash received for c.o.d. goods must be paid in, and the proper entries made in the book, straightaway.

The above, then, is the routine of collection, preparation, and despatch of orders. One or two additional remarks may be helpful. Let the porter have a uniform, or at least a cap with the name of the firm embroidered on the front. This will be quite natural now that the delivery vehicle is so often a motor, which has so many obvious advantages over the horse-drawn variety. The chauffeur will be in the uniform of his class. The sides of the van can be fitted with a board for the display of a poster advertising some goods in season, and will be a very fine perambulating advertisement, especially if it is well kept, smart, and a creditable turnout generally. The question

of the horse *versus* motor is, of course, a matter for the expert, but there can be no question that the motor van seems more up to date and enterprising than the older style of apparatus, and, as such, adds a like air to any business.

### Service and Quality.

Lastly, this system of doing business, as we have said before, cannot be carried on with the same gross profits as those sufficient in the purely cash-and-carry concern. *There will be difficulty in competing in prices; there is no difficulty in giving so much more service.* Service and quality are the two watchwords, therefore, in this type of business, the trade of the "family grocer and provision dealer," and he who would build up his connection—for that is what it will be—must never allow himself to forget this ideal combination of service and quality, and never permit himself or his personnel to act in contravention of either one or the other. Whilst English family life remains as it is, there will always be those to whom price is a far less estimable thing, within reason, than either quality or service. There will, therefore, be customers for the family grocer, and, consequently, family grocers will continue to live and flourish.

## CHAPTER X

## MORE ABOUT THE CASH TRADE

Locality is important in the cash trade, and it is not without importance in the family trade. The market thoroughfare, the busy main streets of a town, proximity to a railway station—such like places are where the cash-trade shop should be situated. There is, perhaps, more competition with this kind of business. The multiple shop companies are obviously all out for the cash business, and do their best to monopolize the supply of tea, butter, margarine, and cheese; and, in a lesser degree, that of bacon, sugar, and other things. Still, there are many classes of goods which the cash trader can handle to much greater advantage, so it appears to the writer, than the multiple shop; or, at least, there is plenty of room for improvement. It will be our task here to indicate some of these directions, which can be exploited by the enterprising shopkeeper.

### The Shop Window.

To begin with, the window is of more importance in the cash trade; indeed, its importance can be described as paramount—you can hardly exaggerate it. Not that it is of no importance in the family trade. The window is the grocer's best advertising asset, a frame which he must always see filled with an arresting, attractive, and convincing picture. This frame has to be paid for. Only think that premises of the same size with the same frontage in a back street or lane will be burdened with a far less rental than those in a main thoroughfare, and you will see that position, a face to the busy street, means all the difference in the annual value. This difference in essence is what you pay for the privilege of having a window which will place your goods under the eye of the public. What folly is it, then, to neglect the window! Yet, speaking generally, the windows of our streets have long left much to be desired. It is only comparatively recently that traders have awakened to the value of good window display. And so the cash grocer must study his windows, and strive after novelty, arresting power, attractiveness, and convincing argument of the "silent salesman" type.

### Price Cards.

Nor must the price card be neglected. In the family grocer's window there is often a reason for not pricing the goods, although tickets describing the novelty, advantages, and qualities of the goods may be desirable. With the cash grocer, prices will be competitive, and an essential part of the argument, and therefore should be quoted in addition to descriptions.

### Window Dressing.

It is not intended here to write a dissertation on window dressing, which is dealt with elsewhere, but some suggestions may not be out of place. The wise trader will seek to show something different rather than follow the lead of the multiple shop branches in the vicinity; for example, when the new Christmas fruit is fresh on the market, it excites interest wherever it is shown, because the Christmas season is in view. Another article which has not been exploited by the multiple shop is coffee. Handled properly, coffee may be a great attraction in a cash grocer's hands, and may lead to much other trade. Roasting, done in view of the public and the results well shown and well sent out, with occasional demonstrations and free cups of coffee in the shop, have invariably resulted in surprising leaps in trade in this beverage and, concurrently, the general trade in other articles has benefited.

The cash grocer's window will, generally speaking, be given up to a bold display of one line of goods, varied by general windows, yet so as not to have too many different articles mingled together. Hence, the cash grocer will be always on the look-out for bargain lines, to snap up at bargain prices, and pass on to his customers on the same terms. He will be in a better position to do this if he is a cash payer. A visit to East-cheap with cash in the pocket will often discover something going cheaply, whilst travellers who have clearing lines represented in their sample cases will get to know the cash grocer as the right

outlet for them. Of course, caution will be necessary, for the good buyer is he who is dowered with this quality, besides knowing by experience or instinct what will sell in his particular trade. At one time it may be cereals, at another evaporated or canned fruits, at another cheese, at another soap—there will, in fact, be few times in which some bargain is not to be picked up. And once in the shop, it should begin to move out *via* the well-ticketed window, the personal recommendation of the salesman, the advertisement in the local paper, and so forth.

## Arrangement of Shop.

Next in importance to, or shall we say parallel in importance with the window and its silent salesmanship, is the personal factor, the salesmen behind the counter. Let us glance at their surroundings, the shop. There should be plenty of counter space, so that the customers may not be crowded out at busy times. And the goods most in demand should be arranged so that the countermen may easily reach them with the minimum of running hither and thither. At back of them, in the fixtures below, stock for ready sale should be stacked, and the counter should be fitted beneath with shelves and drawers for the same purpose. The fixtures at the back and above are best utilized for show purposes, with up-to-date goods, well set out, and with tickets on them. The older fashion was to have one or two rows of japanned canisters, and below them lockers, filled with neatly wrapped bags and cups of sugar. No doubt, a nice range of fixtures thus set out, was very pleasing to the eye of the well-trained grocer, but it is to be questioned whether it "cut much ice," as our American cousins would say. No doubt it had its effect in the general impression of care and neatness, which was received by the customer, but it had certainly but little power of particular impression. In other words, it gave no definite suggestion.

## Suggestion.

That last term, "suggestion," is of vast importance to the salesman, to the grocer, and to the cash grocer. It is being recognized as one of the most powerful factors in the psychology of to-day. The modern theory and practice of psycho-analysis finds its most potent instrument in suggestion, as did hypnosis its forerunner. Suggestion in one aspect is sowing the seeds of fertile ideas, which shall bear the fruit of action. Make your suggestions frequently enough, and even if they are of an undesirable and negative nature, there is sure to be a crop of action. Make many pleasant and alluring suggestions, and they are even more sure to produce a harvest. Now this is the principle on which the salesman will work; this will be the guiding star of the trader when he is showing his wares in arranging his shop. And to the matter in point, side fixtures behind the counter provide a most excellent site and opportunity for making suggestions. The customer stands at the counter, and whilst the assistant is getting one article, finds exactly opposite, let us say, a taking line of new jam. Anciently, there would be there a neat array of 1 lb. cups of Dem., beautifully wrapped and stacked. These would suggest generally that the grocer and his staff prided themselves on their workmanlike characteristics, that unlike the present day, they lived in a time when manual dexterity with goods, paper and string was part of the training, and a not unimportant part, of every young grocer. The stack of sugar might also put into the mind of a customer that she needed some. Both the general and particular suggestion conveyed was, of course, good and useful. But a more useful and paying hint would be that given by the stack of jam and its neat descriptive ticket. In fact, the whole range of back of the counter shelves and fixtures should receive as much attention as the window. Sometimes the window goods can be duplicated in these fixtures, so that the suggestion received by the window is revised and reinforced as the customer stands at the counter.

In like manner, the rest of the shop should be dressed not merely for a general effect of prettiness and tidiness, but with the intention of conveying definite particular suggestions to the customers. On the counter itself, each salesman should have at his right hand a sample of the particular goods at the time being shown in the window, or advertised in the daily or weekly paper. This sample has a double suggestive force—it is directly suggestive to the customer, and to the salesman it is a reminder to call attention to itself with a few words of comment, reinforcing the impression received by the customer's eyes (and possibly by her nose!) with an impression conveyed by the spoken word. For, notoriously, the idea which is generated in the mind by means of several senses is more powerful than that which is due to one only. Hence, it may be useful at times to heighten the impression still further—by means, that is, of the taste. The invitation to taste of certain goods may well be given to the customer at the counter. The sending out of small tasting samples is also no new thing, but, properly arranged and carried out, it is a powerful means of advertising.

## The Salesman.

The style of salesman in a cash business differs somewhat from that necessary in a trade that caters for the family and gives credit. He must be quick at figures, for example. In the old-fashioned trade, the smart counter-man would rapidly and accurately reckon up the total of a dozen articles in his head. From what the writer has learned of countermen to-day, if he were

managing he would insist that this reckoning should be done on paper and checked by another person. This method is also more satisfactory to the customer of to-day. There may, it is true, be other opinions about it, but it is impossible to write on such a subject as this without expressing opinions! Then the salesmen in a cash trade will not go out on the round, but they will have plenty of opportunity at the counter to interest themselves in their customers' requirements, and say, and if he chances to leave they will often express their displeasure.

## Distribution Trade.

As a rule, in this kind of business, the bulk of the trade is very unevenly distributed over the week. The earlier days are comparatively quiet, and should be utilized in preparing for the busy Friday and Saturday. In one cash business which the writer managed, as much trade was done on

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A Wine, Spirit, and Tobacco Department

by the careful introduction of fresh articles, use their powers of suggestion to the utmost. And although the trade may be of the "cash" kind, and even of the "carry" kind (by which is meant that goods are not delivered), it will soon be noticed that the bulk of the trade is done with people who use the shop habitually, the remainder and smaller part of it being with chance callers. Thus, the salesman will get to know the regular customers, and they in turn will get to know the salesman. They will seek out a salesman they know and like, and prepare to be served by him. "Mr. Smith knows my requirements," they will

Saturday as on the first four days of the week altogether, with half that done on Friday thrown in. It suggests that plenty of weighing up should be done from Monday to Wednesday night. Fruit, cereals, and pepper can be weighed in various sizes, as well as sugar and teas. Much waiting of the customer at busy times can thus be saved, and fewer assistants will be needed. Customers do not like being kept waiting, and it is well to speak civilly to any such who cannot be attended to at once, intimating that an assistant will soon be disengaged, that her turn will be next, and so forth. But the writer does not like an attempt

to serve two customers at once, as is sometimes observable in drapers' and hosiers' shops.

Nothing is more annoying to the customer than an air, observable in some salespeople, which seems to imply that one is giving them too much trouble. The true attitude is to give the impression that no time and trouble is too great, provided the customer is thoroughly satisfied. These points are mentioned because there is a great deal of poor salesmanship observable to-day, not by any means confined to the grocers' shops, but in all kinds of establishments. The "service" idea needs pressing home, and a cash or family grocers' business will equally be successful provided the spirit of hearty, willing, pleasant service pervades it. It is just here, again, where the private grocer can score if he knows how to lead and to infuse his personnel with this spirit.

## CHAPTER XI

## THE CARE OF THE CASH—VARIOUS SYSTEMS DISCUSSED

WHETHER a shop bids for the cash or for the credit trade, there will be necessary some business-like system for caring for the cash. It is a curious survival that in certain of the "chain stores" (the American term for the multiple shop) the old-fashioned open till is still in use. And the fact that its use has continued unaltered for the past 25 years or so seems to prove that it is found satisfactory. But then, in these concerns, the stock is a very limited one as to range, only a few days' stock is kept on hand, with very frequent renewals, and a weekly stocktaking is rigidly the rule. Also goods are charged in at selling prices. Thus, if any defalcations are taking place, it will be at once apparent, for the two sides of the trading account will not balance, which, under this system, they must do. Thus, there is quite sufficient check on the cash takings, and so the money can be left in the till and handled by all the assistants in the giving of change, with perfect freedom.

From what has just been said, it will appear that the writer's opinion is, in general, that the open till is both old-fashioned and obsolete. It was almost a universal system or want of system up to a few years ago, but even then it was never satisfactory, either to employer or to assistant. Take the case of the shop with five or six countermen. Should the employer have any reason to suspect that dishonest practices were going on, suspicion fell upon them all, all were under a cloud, until by means of a marked coin or coins, and other detective methods, the delinquent was discovered. The open till was destructive to the peace of mind of many an employer. When stock-taking time came round (if it ever did) and the gross profit was found to be much less than the management had bargained for, the open till was suspected, or, rather, some one was suspected of having had his hand in it. Then there was no check on the giving of change, and it was much too easy to dip into the till for the payment of petty cash expenses, without any note of the outlay being made. To sum up, the open till was most unsatisfactory from many points of view, and it placed far too much temptation in the way of young, often poorly paid, and generally immature and morally unformed persons.

### Cash Desk.

All this being so, various devices were invented for the purpose of taking better care of the cash. Among the earliest of these was the cashier placed in a little cash desk who received all cash taken in the shop. Each assistant had a check ticket-book numbered in duplicate with ten tickets in a column, the book being readily identified by means of different colours. On serving a customer, the assistant entered the amount on the counterfoil and on the ticket, tore out the latter and handed it to the customer, who took cash and ticket to the cashier, the latter giving change. In the main, this was a good system. One drawback was that if the customer was permitted to take the goods before going to the desk, it was not unknown that he or she, during a busy interval, would slip out without troubling to pay at all. This was often the case, in the writer's experience, in a shop where the cash desk was situated quite close to the door of the shop. It was a system which protected the assistant, for although it did not provide any check on the correct charging of the goods, it left no room for dishonesty—unless, indeed, there was collusion between a counter-man and some person whom he was helping to get goods on the cheap. At the end of the day, the cashier, who had entered up every check on a properly ruled sheet, totalled the different columns, and each assistant in charge of a book would add it up and compare it with the totals of the cashier. Then the total cash in the desk, less the change with which the day was commenced, would have to correspond with both sheet and books.

### The Duplicate Bill.

This system, with one important modification, is in use to-day in many one-shop firms of first-class and old-established grocers. The modification is that the assistants make out a bill for each customer in duplicate, the customer takes both parts of the bill to the cashier before receiving the goods, the cashier retains one part, receipts the other with a perforating stamp, and then

enters the details into analysing columns on a sheet, having handed the receipted part to the customer, who takes it back to the counter and receives the goods.

In a former chapter was advocated the giving of a bill, and retaining of the duplicate, for each and every transaction, however small. There is a concrete case of its being done by a large and very businesslike concern. The cashier has plenty of time during the day to enter up the analysis sheet. Thus, there may be tea, canned fruits, bacon, and cheese on the retained duplicate. The amount of the tea, etc., will go into the appropriate columns, and the total amount in an outside column headed "totals." The business is thus sectionalized and the exact sum each day received for the goods in each section is readily ascertained. In this way, the sales of each section are available for periodical stocktakings, at more or less frequent intervals, and a valuable check is kept on the profit-earning of each section. It would be difficult to imagine a more perfect system of control of sales and profits, and this is the very essence of effective management on which all other things are based. Here are definiteness and figures of precision rather than estimates, a much more satisfactory, because scientific, method of working.

## The Cash Railway.

It was inevitable, of course, that the mechanic should enter on the scene to devise various engines for helping the grocer—and other traders—to take care of the cash. One of the first devices to appear was the cash railway. Two main forms of this are to be noted: the catapult variety and the pneumatic tube. In the former, little cars are shot along a wire to a central cash desk; in the latter, the cash and bill or ticket are enclosed in a tube which is driven by compressed air through pipes to a central desk. We are not concerned here with the mechanism of either system. The overhead wires and machinery at the "stations" over the counter are objected to as tending to disfigure the shop's appearance. In the case of the pneumatic tubes, these are led by hidden and devious ways beneath the counter, so that there is but little ocular or audible evidence of their existence. Our main point is: "How do these devices protect the cash?" Obviously, they are a more scientific and certain means of protection than the open till, but it may be questioned if they are quite so safe as the cash desk to which the customer must resort, which (excluding collusion between assistant and cashier, or between assistant and outsider) seems to be the safest method, especially if a bill for every purchase is the rule.

The writer has witnessed the safety of the overhead wire system break down rather badly, but refrains from describing exactly how it can be done from quite obvious reasons. Suffice it to say that a like failure could not have happened where the customer herself carried the bill and cash to the desk and returned for the goods. Nevertheless, the cash "railway" system in its several varieties, has many manifest advantages, without being absolutely thief-proof. It is to be doubted if any system could be invented which would fully merit this description.

## The Cash Register.

A later device of the mechanical kind may be summarized by the term "cash register," of which there are several kinds, of both foreign and British production. In their simpler forms, these are quite within the reach of even the smallest shopkeeper; the larger and more elaborate kinds are fitted with such powers and possibilities as the following: (*a*) Separate cash drawer for each assistant, up to six or eight, which only tha assistant can operate; (*b*) adds each assistant's total, and the combined totals of all (thus at the end of the day the amount of cash in the till is stated by the machine); (*c*) a printed receipt check is issued to each customer for the amount received (this is useful where a dividend-giving scheme is in operation). There may be other advantages also, and the cash is protected by the amount put into the till being shown on an illuminated dial operated by the pressing of the keys, which at the same time rings a bell and opens the drawer. It will be observed that the assistant gives change, but there is nothing provided by the till to check what change he gives in each particular instance—nor could there very well be—although any mistakes thus made will throw out his total at night. It is just here where the cashier at the desk who received cash direct from the customer and the cash till agree in a certain weakness; and the cash railway system, where the change is, or should be, checked by the assistant counting it out to the customer, scores over its rival. For in the latter method the change is counted out by the cashier, and again by the assistant. The simpler and cheaper cash tills have a roll of paper showing through a slot, on which the assistant enters up in pencil the amount taken. The opening of the till causes a bell to ring and moves along the paper on the roll one space beneath a glass window. Thus, the amount cannot be altered, and is visible for awhile, before it is absorbed into the rest of the transactions preceding it. At the end of the day, the till-roll has to be added—rather a long, tedious, and irksome business, after a hard day's work in the shop. On the roll, credit accounts settled can be noted with the name of the payer, or there can be two columns on the roll.

To sum up, the kind of cash control system adopted must depend on the particular type of business. The principles governing the choice of a

system are : first, protection ; second, accuracy ; third, speed. And although no system can be described as absolutely free from any weakness, it is possible to reduce this negative characteristic to a minimum.

## CHAPTER XII

## RECEIVING AND STORING GOODS

THE functions of the trader, what he has to do and what he has to avoid, are all concerned about goods. Of some of these functions we have already treated in more or less detail. For instance, we have dealt with buying. But one might retrace one's steps for a moment to note that the traders' functions arrange themselves in a certain sequence, something like this : buying, receiving, storing, showing, selling. And now as to the second of these, receiving, and the third, storing, there are one or two matters of importance deserving attention. In the first place, the trader must watch carefully the item of carriage inwards. There are, of course, goods which come carriage forward, others which come carriage paid.

### Carriage of Goods.

The law as to the carriage of goods is lengthy and complicated, and the present writer would not venture to dilate upon it, holding that legal matters are for the legal master ; that is to say, a department of the law can only properly be dealt with by a lawyer or other expert. From the section of this work relating to the carriage of goods, the trader will learn much that cannot fail to be to his advantage. There are signs of a movement in the direction of asking all manufacturers to supply their goods on carriage paid terms. But for various reasons it does not seem likely to come about. The difference between " carriage paid " and " carriage paid to the nearest railway station " should be noted. In the latter case, the trader finds that he has to pay the cartage charge from the station to his shop, or fetch the goods in his own van. Here is another caution that may be very well reproduced : " Be sure you give the full address with your order to the manufacturer or wholesaler." There is more than one Sudbury ; so also there is more than one Sutton, Newport, Yarmouth, and Kingston. In consequence of neglect of this rule loss and delay might ensue for which the railway company would not be liable. The caution is needed, because some traders do not print a full address on their letter headings and order forms. Thus, also there are many other precautions to be taken as regards the actual cost of the carriage, and it may safely be laid down that the shopkeeper who studies the question would be in the position to save the most money. For carriage inwards, as we have seen, is really part of the cost of the goods, and as such, should, according to good practice, appear in the Trading Account. Now, obviously, getting goods sent the cheapest as well as the safest way will reduce costs. " Safest " is said because, in the case of easily damaged goods, the cheapest way may not be the safest. Thus, it may be better to pay more and have such goods sent at carriers' risk rates than take advantage of the lower rate applicable to owner's risk—the extra carriage will be in the nature of an insurance against loss in transit.

### Receipt of Goods.

On arrival, of course, the goods should be thoroughly examined before a clean signature is given to the carman. There is some reason to fear that this is not always done. Some goods, such as jams, sauces, boot polishes, and a host of others are invoiced by count ; others, like sugar, bacon, cheese, etc., by weight. Hence it is that every trader should have platform scales capable of weighing up to 4 or 5 cwt.

To sum up, there should be a system in regard to goods received which should ensure : (*a*) That they are taken into stock in good condition ; (*b*) that there is the right quantity ; (*c*) that the charges, if any, for carriage, are correct according to the regulations. Short weight, for example, must be guarded against, and hence the use of the platform scale, which will check not merely occasional pilferages, or the results of accidents (such as the tearing of a sugar or flour bag, the breaking of a raisin box), but mistakes made by even the most careful and systematic of wholesale houses.

### Storage.

And when the goods are received, there must also be system in the matter of stowage and storage on the premises. As a general rule, the warehouse or store-room is the place for unbroken packages, the shop for the goods broken out from the boxes and packets, ready to the salesman's hand. There should be a place for everything, and everything in its place in warehouse and cellar, and, indeed, also in the shop. And it is often in these out-of-sight places that the least care is taken. Confusion in warehouse and cellar always means waste. There are also the natural enemies of the stock to be guarded against—rats, mice, and insect pests—and damp places are to be avoided for the storing of flour, oatmeal, sugar, soaps, tea, coffee, and many other goods. For sugar, cereals, raw coffee beans, peas, etc., there is nothing more efficient than a galvanized bin with a good cover. This is particularly the case with oatmeal.

### Clearing Out Old Stock.

Now, there is one thing which must be carefully supervised by the management—that old stocks

should be brought forward for sale before the new is touched. Some kinds of warehousemen, some types of badly-trained assistants, will shoot a fresh new oatmeal, rice, or raw coffee into the bin on top of successive remnants of the last consignment. This is a very bad practice, and sooner or later the customers will get stale stuff and complain, not without good reason. If an oatmeal bin is treated in this way, weevil will develop, and the flakes be found matted together as with a fine hair-like mesh. The only remedy is to turn out the bin, condemn the meal to chicken-food uses, scald the interior out thoroughly, and dry the bin in the sun before it is used again. New jams should never be stored in front of old; fresh bags of flour must never be piled on top of the last bag or two of the previous lot. Move these, sweep out the place, and free it of the dust and dirt and stale droppings, if any, and put the new goods in a clean place. Lastly, never leave broached packages or odd quantities in the storeroom or warehouse. The gross of matches, the dozen of sauce, the whole unopened case of salmon, or box of raisins, or half-chest or chest of tea, should be the rule. The shop is the proper place for smaller quantities. And the same rule should apply to goods such as jams, pickles, and any loose goods; let them be in complete dozens, or other unit quantities in the storeroom, or else be moved to the shop.

## Stock in the Shop.

In the shop itself, the fixtures should periodically be properly filled up from the warehouse, the junior hands and apprentices being usually entrusted with this duty. The same rule of older stock to the front applies here, and at frequent intervals there must be a dusting out of every fixture, for it is wonderful how soon an accumulation of dust covers the goods at the back and interstices between them. Those who bring goods forward and fill up the fixtures should be instructed to note all goods running short, list them, and hand the lists to the manager, so that he may be warned to re-order if he deems it to be necessary. It has been well said that "order is heaven's first law"; it should certainly be one of the inflexible rules of the shop, and it is only by system

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AN UP-TO-DATE GROCERY STORE

such as this that order can be obtained, and with it that efficiency which spells success. Moreover, a stock in disorder, with the same size and line of goods in three or four different places, makes for over-stocking. If there is twice as much stock as is needful in the case of half the goods, it is obvious that the whole stock will be 50 per cent larger than it ought to be, more capital will be sunk in the business than there should be, and, consequently, it will not be able to earn enough profit to pay a reasonable and proper interest on the capital. These things are not often considered by the trader, especially by the trader who is not also something of a financier. And every trader, large or small, should be that in respect of his own business. Most financiers began by being financiers in a small way, and because the habit was formed early and grew with the prosperity which it itself fostered, they became what is usually understood by the term "financiers"—men who control large sums of money. The difference is not in kind, but, rather, in degree.

## CHAPTER XIII

## THE STAFF

He who would manage the shop well must manage the staff well. The human element in business is an important thing, and not least when that business is the shop, large or small. There should be a sort of natural sympathy based on understanding between the head of the business and his employees, or one would think so. When it is remembered that he was probably all that they are in his turn, there would seem to be some foundation for this assertion. How many employers of to-day started as errand boys, or, at any rate, as apprentices, progressing upwards as junior assistants (we used to call them "improvers"), then as assistants, first hands, managers, and so to the goal of every ambitious junior, the opening in business for himself? But it is not always the case that he who has the management of other men will have been properly prepared for the responsibility by that ascent. So much depends on the natural temperament of the man, whereby we are reminded of its division by the ancients into four well-marked species of character—the choleric, melancholic, phlegmatic, and sanguine. As a rule, a man has a combination of all these in greater or less degree, and the trader is no exception. It has been the boast in many trades that an excellent understanding, pleasant relationships, and mutual confidence have, as a rule, existed between employers and employed. And there can be no doubt that there is much justice in this estimate. So it is "up to" each proprietor or manager to endeavour to live up to the tradition he inherits.

### Punctuality, Etc.

And first, the head should be a leader, and show by his example more than by precept how things should be done. The atmosphere, the *esprit de corps*, of a staff largely depends on the attitude of the governor. Cheerfulness is very conducive to good business: it oils the wheels, and is the parent of speedy and good work. As "well begun is half done," there should be no delay in getting busy when the shop opens in the morning, which it should do punctually. In a staff of any size there should be a time book, and every member of it ought to sign on when he or she arrives, and, if late, the exact time should be added. It is a counsel of perfection, no doubt, that the proprietor be in attendance at the shop's opening. That will depend on the size and character of the business; but, in any case, he should make it his affair to be there sometimes at the opening minute, whether by surprise appearance or not, and thus he will be able to maintain the good custom of everyone at once getting busy at his or her appointed job. There is more in this than meets the eye. There may be, and is in some shops, a lot of loitering during the first half-hour or so after opening. It takes so long for some people to get their coats off and their aprons on, and say "Good morning"—and several other more lengthy things—to their colleagues. The time book should also be used for the dinner-hour disappearances and reappearances. Here, again, a kindly discipline is needed so that *the hour* (or whatever time it is) may not be exceeded. Punctuality (which has been described as "the soul of business") is largely a matter of habit. In fact, slackness in this matter is the very parent of demoralization in a staff. It is only fair to add here that punctuality is almost as important at the other end of the day, and in the middle, too. Assistants should know, as far as possible, the exact times they are expected to go to meals, and when they may expect to be done at night. In return, they must understand that they are expected to come back punctually from lunch and arrive in time in the morning.

### Allotment of Duties.

There will be an apportionment of duties among a well-regulated staff, each, even to the youngest, being made responsible for his allotted task. This sentence is meant to be strictly emphatic. It is the only way to put men on their mettle and get the best out of them. At the same time there should be no encouragement of the attitude symbolized by the phrase: "I can't do that; it's not my job!" Naturally, the tasks will be appropriate to the person. Thus, beginning with errand boy, he will have his jobs, such as cleaning

brasses, sweeping, polishing windows, and so forth, all necessary and indispensable, as well as the duties connected with the delivery of goods. Quite obvious, you will say, to the meanest intelligence. The point is, however, that even the errand boy can be encouraged to take a pride in the way he does his work. It is the habit of some to be quite ready to blame, with bluster and fuss, when something is neglected or done badly; they quite forget the value, not only to the other person, but to themselves, of the word of commendation when things are well done. Yet it means all the difference. It makes for happiness and better work in the one who receives it, encourages him to put thought and energy into the doing, and costs the giver nothing, not even a loss of dignity.

The apprentice will have his duties assigned to him also. These will be of a progressive character, and a scheme of them has been designed by an enlightened employer which well deserves quoting. Correlated with the duties of the apprentice are the things which he ought to learn—

FIRST YEAR. *Duties.* — Weighing and wrapping. *Training.*—The business value of personal appearance, bodily health, true morality, honesty, punctuality, and the "service" idea.

SECOND YEAR. *Duties.*—Salesmanship and care of stock. *Training.*—Personal efficiency, psychology of customers, seeing the customers' view-point.

THIRD YEAR. *Duties.*—Window display, stock-keeping, coffee-roasting, book-keeping, etc. *Training.*—The science of business, how profits are made, accounting.

FOURTH YEAR (if any). Perfecting the youth in the above.

During the whole time, arrangement is to be made for the apprentice to attend such classes as those of the Grocers' Institute and others, so that formal education may go on side by side with the training in good business habits, and the practice of actual duties in the shop.

The shopkeeper who is the most genuinely interested in his staff will, in the human nature of things, get the very best out of them.

## Window Display.

We have already noted some of the duties of a staff, such as assisting in the keeping of stock, each assistant having his own sections to look after; the routine of going round for orders and of preparing the goods for despatch, and other matters which are the regular necessary duties. Then there is the important task of arranging the window display. In a small shop the proprietor or manager will doubtless be responsible for this himself. He will plan his shows beforehand, prepare for them by collecting the goods, apparatus and decorations, and by having any necessary tickets made. Then, when the actual time comes to clear the window of the old display and put the new one in, there will not be that tiresome delay and incidental muddle which is inseparable from window dressing day in some shops. In larger establishments there will be found an assistant who is worthy of being made responsible for the window or windows. If not, the proprietor had better set about finding one. When found, there should be much sympathy, intercourse, and consultation on the subject between management and display man. The former will have to direct the policy, the latter's province will be to carry it out. He should not be afraid to indicate what help he needs, preferably making a rough sketch of his design to discuss with the proprietor beforehand. In many cases there is not enough head work connected with this and other important departments of the management of a business.

## A Selling Plan.

For example, on the selling side, there might be better results if a plain and well understood policy inspired everybody at the counter. Let us suppose a new line of canned fruits is bought. The line of least resistance is simply to have it dumped in the shop, announce the price, and let the salesman find out for himself what are its selling points. Here is a more excellent way: Open a tin and turn it out into a glass dish, gather the salesmen round, and point out the particular excellences of syrup and fruit, indicating the grade, the number of pieces in the can, the heaviness of the syrup. Compare the price with that of the kind which was previously on sale. Thus, the salesmen will be primed with definite information of a reliable kind on this particular article, and should not be at a loss when at the counter. They should also be "enthused" with the goods, and take a delight in selling as many as possible. This is, of course, but an illustration, and the point and process can be commended in relation to other goods, all of which have their selling points. It may not be so necessary in the case of the older, well-trained salesmen; but it will be invaluable to the younger members of the staff, whose education and usefulness will be helped thereby.

## Staff Meetings.

It is an excellent custom, which is being put into practice by many high-class and progressive firms, to call staff conferences from time to time. Large wholesale and manufacturing firms hold such conferences of their travellers; retail many-branch companies gather their managers together, and the mutual assistance and encouragement thus rendered is immense. Not by any means the last person to be benefited is the proprietor himself, or the managing director, as the case may be. Confidence begets confidence, and such consultations are in accordance with the spirit of the age, which is in the direction of the workers having a

larger share in the management of a business. And if it is good in the case of travellers and managers, it is good also in that of the salesmen and assistants in a retail shop. All those over a certain age, not below apprentices in their fourth year, it is suggested, should be included in the conference, and all should be encouraged to contribute their ideas in the debates.

### Correcting Faults.

Then there is the sometimes painful duty of correcting faults and failings in assistants. We say "painful" because, with some men, it is a veritable few minutes' agony to have to take to task a fellow-man, even though he be an employee, and a junior at that. Some employers are troubled over such a matter for much longer than a "few minutes." Often the anticipation of having to perform the task will give a sleepless night, but it is a duty that must be done, or the consequences will be bad for the business and may be even pernicious for the man who escapes having justice done him. Now, if correction is called for, let it be done calmly and without heat or the manifestation of feeling, and, above all, let it not be done before customers, or in the presence of the delinquent's fellow-assistants. The office is the right place for that serious little talk, and for the pointing out of habitual or casual faults. Correction in the face of the world only exasperates, because it unduly humiliates. Kindly correction as man to man, in privacy, will carry far more weight, without the added sting which witnesses give. Of course, if a man is so thin-skinned that he cannot take it well in these circumstances, it is his own fault; but the wind can well be tempered to such shorn lambs with a little tact. The thicker-skinned, whose pride will not let them reform or correct themselves, should be given time to amend, and if they are then proved to be incorrigible, the "sack" is the only appropriate finish.

## CHAPTER XIV

## SPECIAL TIMES AND SEASONS

The shopkeeper has his special times and seasons which offer him opportunities for more trade. One great aim of every shopkeeper should be to increase his turnover, without, if it is possible, increasing his expenses. If the weekly volume of trade is represented by a graph on squared paper, the horizontal lines standing for weeks and the vertical lines for cash, it will be noted that the "curve," or, rather, the wavy line which stands for the trade done, will be very irregular. For example, in the grocery trade, at such times as Easter and Christmas, in the London area, there will be considerable peaks; and contrariwise, in early March and in August, there will be considerable depressions (*see* p. 454). This means, of course, that the volume of trade done is never constant, but varies considerably according to the season. On the other hand, the lines representing expenses in our graphical scheme will be, generally speaking, unvaryingly horizontal. Thus, there may even be some weeks in the year when the grocer will not make enough profit to cover his week's expenses. These are counterbalanced by those other glowing weeks when a heavy turnover will mean such a gross profit as will leave him a good net, and the law of compensation will thus bring him out on the right side in the mass and at the end of the year.

### The Grocer's Busy Season.

Thus it comes about that the grocer must do his level best to take every advantage of the special seasons when the public have money to spend, are bent on festivity, and make good eating (and drinking) a feature of their enjoyment. He may not be able to help slack seasons, such as August brings to the suburban trader, nor will his efforts be very fruitful just then; but he can cultivate the other kind of time, and the result is almost sure to be commensurate with his enterprise.

In early November, preparation for the Christmas trade is the order of the day. The housewife usually makes Christmas puddings and mincemeat in November, so that they may mature against the time they will be used, seven weeks or so later. That fine show of Valencias, currants, candied peel, almonds, spices, suet, etc., is now more than due. Also, the grocer can make a preliminary show of figs, prunes, and other winter specialities. He will be seeing to his stock of cosaques, fancy tins of biscuits, chocolates, candied fruits, and the other goods with which during the early weeks of December he will dress a really artistic window.

A Christmas leaflet, with list of seasonable goods, may well be planned, nicely printed, and then efficiently distributed. Often this last precept is the one that is neglected, thus nullifying the expense and trouble entailed by the former. The list can be sent out with the weekly bills and books, enclosed in parcels, and, indeed, sent out by the halfpenny post to the residents in the best streets.

If the business is of the family kind, the roundsman should be encouraged to take samples of goods suitable to the Christmas season on their journeys. This can be done in instalments; first the new pudding fruits, then later the fancy goods. For there are always some customers who do not come to the shop, and, in that case, the contents of the shop should be taken to them! So the Christmas season can be well prepared for, and

the same applies to the other months of the year when extra business can reasonably be looked for. Easter is one of these special seasons, although it is not so fruitful of extra trade as Christmas. Even Whitsuntide is susceptible of a large turnover. At the seaside, of course, the time of harvest will be the holiday season—late July, August, and early September. But then the seaside grocer will not have such a bumper time at Christmas as his London brother. Thus it is that the grocer must have regard both to the place in which he is situated and to the time of the year, and plan to take best advantage of all circumstances.

## CHAPTER XV

## STOCKTAKING

ANOTHER special time, but with a different purpose in view, is stocktaking.

### The Stocktaking Arrangements.

A large firm with many branches arranged its stocktaking as follows: There were two general stocktakings each year, the first Monday in April being one date, and the first Monday on October being the other. Now, obviously, the one or two members of the stocktaking staff at head office could not be in two places at once in these days of general inquisition, so, on the occasions in question, each manager was entrusted with the duty of taking down his own stock. But, so that the directors might have a check on all the stocks at branches, there was a third independent stocktaking on some surprise date, when the head office official stocktaker would come down to the branch and do his duties, working through all the branches during the course of the year. It may be asked why were April and October chosen for the days of general judgment? The answer is, because trade, generally speaking, at these times of the year, permitted the management to reduce stocks to as low an ebb as was consistent with doing the trade. As a rule, these two Mondays missed the specially busy season—the October date was before the Christmas stocks were got in; the April date was generally before Easter. Sometimes it fell on Easter Monday, and then the staff was requested to work on that day, being given a compensating Monday's holiday a little later on, each in turn.

### Method of Stocktaking.

Coming to the method of stocktaking, it was well prepared for in advance by the reduction of stocks as before noted. Immediately before the date, all goods were arranged, collected together, and put in order, so that the quantities might be ascertained almost at a glance. It is well to have the tares indelibly marked on all drawers, bins, and canisters. This saves much time on the actual day of stocktaking. Thus, the drawers and tins can be taken out, put on the platform scale, and the gross weight and tare noted down—for all things weighable should be weighed, and not merely estimated. Unbroken packages in the storeroom, warehouse, and cellar are easily noted down, with any marks. The fixtures in the shop having been replenished beforehand, the stocks in cellars, etc., can be taken before the actual day, leaving the shop to be done in the early morning of the day itself. Even here, before the day, the junior staff can count the goods in fixtures and put a slip of paper under each one of the articles, with the number of the same clearly marked on it. The last thing on the Saturday night before the Monday of stocktaking, everything can be put in order. Then it is best for the staff to arrive at 5 or 6 o'clock on Monday, so that the stock may be taken by 9 o'clock or so, before the ordinary business of the day begins. The manager (or proprietor) and also the senior assistants, each with a helper, actually take down the stock, the senior writing down the items on a foolscap sheet divided into two columns, with space for the name and number and price of the goods, and cash columns. The junior calls out the quantity and the stocktaker checks the count, which, if the goods have been properly arranged, he will generally be able to do without much trouble. All carrying-out of the quantities is left until later, the immediate and pressing business being to get the goods correctly and legibly listed. This procedure may involve some early-morning extra work, it is true, but all responsible will agree that it is much better than the muddle and unsatisfactory risks of incorrectness incident on taking stock whilst the ordinary business of the day is going on.

### Charging Up Stocks, Etc.

It is to be noted that all returnable empties which have been charged to the business must be taken into stock; and, indeed, all containers which can be sold are so much valuable stock and should be accounted for—it will all help to give a true account of the profit made. Goods of which the invoice has been dated before the day of stocktaking, but which have not arrived on that day, must be accounted for as stock on hand. On the other hand, should goods be in stock, and the invoice not arrived, the latter, when it turns up, will have to be treated as a pre-stocktaking transaction. In regard to the pricing of goods, the best thing is to go by the market price of the day. Old and damaged stock should be judiciously marked down, or, better still, it should have been disposed of as a pre-stocktaking cheap line at a substantial reduction, if need be—always premising

that, if it were an eatable, it was fit for human consumption. If not, the dust-bin was the only proper receptacle for it! Bags, wrapping paper, and twine are all to be taken into stock at cost price. These goods are undoubtedly part of the cost of the goods; yet how few traders there are who take this cost into consideration when fixing their prices! Doubtless, in the case of sugar and a few other things, the custom still holds that the goods are weighed in and with the paper. But brown parcelling paper and tea-bags, for instance, are an added cost which the customer does not directly pay for with the goods. This is also true of twine. Now, since these things have been much more expensive during the last few years, due note should be taken of the fact, where possible, in fixing prices, and also at stocktaking time.

Another item is the quantity of uncharged empties, if any, in the hands of customers, such as syphons and ale bottles. Of course, if customers do not pay for these, a strict account should, nevertheless, be kept of them.

## Proper Stocktaking.

And, lastly, it is to be remembered that any mistakes in either taking down the stock or in reckoning it out on the sheets will be reflected in the figures representing the gross profits in the Trading Account, and again in those representing the net profit in the Profit and Loss Account. And not only so at this stocktaking, but at the next one also. Anyone taking over a management should insist on seeing the stock properly taken. Cases have been known where an outgoing manager has been allowed to take stock himself, and has greatly inflated the figures representing the value of the goods on hand. This has made his profits look larger than they really are. Later on, at the first stocktaking of the new manager, the result has been exactly the opposite—the profits have appeared smaller just because of the previous malpractice over which he had no control. It is for this reason that the buyer of an established business does well to be represented by an independent expert at the valuation, including the stocktaking.

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A Fine Centre Display

CHAPTER XVI

## ON CHARGING GOODS TO BRANCH SHOPS

In an earlier chapter it has been argued that the shopkeeper with branches can maintain a far better control of his business if he charges goods to them at selling price rather than at cost price. It was also noted that a system would be outlined by which this is easily done with a minimum of writing, and consequently with lessened liability to mistakes and disputes between the head office and branches.

The proprietor of a private firm in the North has invented such a system for his own business of some thirty branches with head warehouse, and has had it in practice for a number of years, finding it to work quite satisfactorily, to require but a small amount of clerical labour at head-quarters, and to be practically proof against the many errors which often accompany more elaborate methods. The system to be described has therefore the merits of being eminently practical, and is not at all the invention of a mere theorist, although none but a thinker and planner could have evolved it.

### The "Webhan" System.

The following is the description of a system called the "Webhan" System of Charging Goods to Branch Shops.

A separate book is used on alternate weeks for each branch. The book consists of 100 duplicate pages, foolscap size, numbered. The top sheet has two cash columns, one at the left-hand side for retail price extensions, and one at the right for wholesale extensions; the centre space being used for entries of goods sent from the warehouse or direct. This top sheet is perforated at the extreme left side, so that it may be detached entire.

On the left of the underneath page is a cash column (perforated on each side) immediately under the top page cash column, numbered similarly to the sheet it is part of.

This underneath page is divided into four sections with numbers which run consecutively through the book.

Entries for goods sent are written on the top page between the two cash columns, carbon paper being placed beneath to give the second impression.

The pages with carbon entries are sent with the goods to the shops, thus forming a delivery note, and are always detached, bearing a number or numbers. The cash column on the left is kept in the book till used at the week-end for extensions.

When the goods have been checked at the branch, these delivery sheets are pasted into a

SPECIMEN PAGES OF THE "WEBHAN" BOOK

(Top sheet)

| Folio I. £ | s. | d. | Particulars. | Price. | Folio I. £ | s. | d. |
|---|---|---|---|---|---|---|---|
| | | | 1 | | | | |
| | | | 2 | | | | |
| | | | 3 | | | | |
| | | | 4 | | | | |
| | | | (This centre sheet is retained at Head Office.) | | | | |

A B C

Perforations at A. Retail-price cash columns at B.
Wholesale-price cash column at C (on top sheet only).

(Duplicate or Bottom Sheet)

| Folio I. £ | s. | d. | Particulars. | Price. | Folio I. |
|---|---|---|---|---|---|
| | | | 1 | | |
| | | | 2 | | |
| | | | 3 | | |
| | | | 4 | | |
| (This column is sent when completed to Branch.) | | | (This part sheet is sent as Delivery Note with Goods to Branch.) | | |

A B A

spare book of a suitable size, or one made with brown paper, the numbers following each other down the page.

This brings the carbon copies as a completed page into exact position, as they were before being detached.

At the week-end the retail values are reckoned and entered on the left-hand side of the top sheet with carbon beneath over the cash column left in from the bottom sheet.

When these charges are completed, the bottom cash columns are detached and sent to each manager, who can paste them exactly opposite each item on the delivery sheets he received with the goods, and then check the extensions.

Thus only one writing is necessary, and the labour of copying out a full week's charges, with its attendant risk of error, is obviated.

A manager can report the exact position of any error in the extensions by referring to the section number.

The wholesale charges are entered in the right-hand cash column of the top sheet, which is detached at the perforation and retained at the head office as a Sales or Day Book. This sheet shows at a glance the retail and wholesale values and the gross profits. Comparisons also show which shops sell the best profit-yielding goods.

While one book is in use in the warehouse, that used the week previous is in the office for the purpose of being reckoned up.

### Advantages of the "Webhan" System.

One Entry serves the purpose of delivery note and charges sheet. This saves all re-copying of a week's delivery of goods, which usually takes a great amount of time. Besides saving time at the office, all risks of errors (which are very great in re-copying) are done away with. It is a common experience that the more copying of accounts, the greater liability to mistakes. The shop manager has not to check each entry line by line. He has simply to check the cash extensions. In case of any error he can give the exact position of the line referred to when writing to the office. This saves time also. The manager sees the exact retail charges only. The wholesale charges remain at the office, and are shown side by side with the retail values.

### Returns from Branches.

It will be seen that nothing has as yet been said about the manner of treating returns from the branches, i.e. empty cases which have been charged, spoilt or damaged and therefore unsaleable goods, and slow-moving lines, which are better collected from the branch before they deteriorate to be sent to another branch, perhaps, where there is a demand for them. It is recommended that in the case of returnable packing boxes, jars, or other receptacles, a separate "in" and "out" book (it need not be bulky) be kept for each branch; but for goods of a saleable character, which are returned from the branch, deduction be made at each week-end when totalling the "Webhan" book.

Specimen pages of the "Webhan" book, which was designed by Mr. Arthur Williams, F.G.I., are shown on p. 476. The book is fully protected.

*(The following chapters of this Section are by other contributors.)*

## CHAPTER XVII

## ADVERTISING THE OPENING OF A BUSINESS

Opening a business furnishes a reason for special advertising. Custom and courtesy make it appear a proper and orderly act for a trader, possibly a new-comer to the district, to notify the householders whose custom he hopes to gain that his business is at their service.

The new suburban milk shop or grocery store is usually notified to the inhabitants by some printed matter being thrust into the letter-box. A circular, a handbill, or a card is the usual form this takes. Simultaneously, the local press is used to broadcast the statement.

This custom is good up to a point. But it is doubtful if any great value lies in this kind of overture unless it is regarded as part of a more individualized campaign.

Thin, scattered publicity is rarely as valuable as more concentrated and directed effort, and it is doubtful if the majority of traders who out-lay money in this way obtain any adequate result.

There are some occasions when this may be a very useful method; these are usually when a business is being opened that will offer facilities to a neighbourhood that it does not already possess.

Thus, a man intends to open a stationer's shop in a small town. There are already two stationers in the neighbourhood, but neither has a circulating library, and a circulating library is to be the strong feature of the new venture. The nearest existent library is nearly two miles away from some houses, and well over a mile from others.

Obviously, the opening of this library is a news item in itself. People may get to hear of it, but it is wise not to leave this to chance. Every letter-box constitutes an opportunity, and a communication should be sent to every house likely to hold a reader.

But supposing the man is a grocer and there are already three grocery shops in the area, the letter-box notification is only justified as a part of a

vigorous follow-up campaign of a more specialized nature.

The grocer's best introduction to a neighbourhood is not the client's letter-box, but his own front window. People can manage without a circulating library; they cannot live without groceries. The advantages of one gain recognition by telling; householders will go out and hunt for the others.

### Special Features.

In advertising a new business, general statements are best avoided or summed up in a few words. The unique and special feature is the point to bring home.

Thus, the man opening the stationery shop will simply call himself "stationer," and let all the envelope, writing paper, and fountain-pen trade go at that, because there are already stationers in the district. The library is the new feature, and it will be time enough to talk envelopes when people flock in to borrow books.

The grocer whose card is thrust into the letter-box is addressing a housekeeper who already buys groceries and is probably well satisfied. The card is largely wasted print unless it has a special offer, or is to be followed later by a special call.

The special offer may be a line of goods at a particularly low price.

This is a time-honoured way of opening a shop, but it is a method that needs to be considered in full view of the future. It is always easy to buy trade by selling goods below cost, but such trade is almost certain to be lost again as soon as prices are raised.

A trader should commence as he means to go on. If it is to be part of his future continuous policy to have special bargain days, then there is no harm in making his opening day one of them. But the shopkeeper who commences with a great splurge of cheapness and then adopts sober methods, gains no more advantage than if he had opened a shop recently used for the clear-out sale of a bankrupt stock.

### Special Advertising.

Opening a business lends itself to special advertisement of an indirect and unusual character. One great firm of provision merchants in its early days studied to make the opening of a branch a local event. The arts of the showman were called in and a procession of imposing dimensions, rivalling a Guy Fawkes' celebration, perambulated the town. Handbills were not thrust unobtrusively into letter-boxes as much as hurled to the four winds in staggering profusion.

Some years ago the opening of a great Oxford Street store was heralded by full-page advertisements in the press of artistic merit and attractive boldness.

Such opening celebrations as these involve heavy cost and are out of the range of ordinary traders.

But in a smaller way, quite successful schemes have been carried through with good result. For instance, in a large suburb a new business was recently opened with a competition for children. A few pounds were offered in prizes in one of those popular contests that appeal to the juvenile mind. The particulars were boldly posted in the window while the shop was being made ready, and by the time opening day arrived, with its "Result of Competition" displayed in a prominent manner, practically every household containing children was well aware that the new shop was being opened.

ALBERT E. BULL.

## CHAPTER XVIII

## CATALOGUES AND PRICE LISTS

WHEN a possible buyer is sufficiently interested to ask the price, the wise salesman will stop his arguments and give a plain answer to a plain question.

The catalogue or price list should be issued in this spirit. It is "the plain answer to a plain question."

The majority of the printed matter issued by a business firm is very like the majority of the conversation of a good salesman. It is an argument in favour of the articles to be sold, an inducement to the buyer to buy, a play of mind upon mind in which it is permissible for every art and ability to be directed to arousing interest and awakening a desire to buy.

The good salesman can illustrate from Euripides or the Northern Lights. He may quote Aristotle or *Punch*; wax indignant against the Income Tax or merry over the latest joke. He can be irrelevant or satirical, earnest or vitriolic. He can be eloquent or monosyllabic; round-about or obvious.

But that question: "What is the price?" demands a plain reply.

Firms may issue any kind of printed matter that will help to sell. With pianos and organs for sale, a brochure may commence with a map of Martian canals or a chapter on the mathematics of sound waves, or a yachting tour in the Orkneys.

But when it comes to the price list, people want the facts.

Plainness can be attractive. Distinct description can be highly artistic; a price list can be a thing of beauty; but it must always be "a plain answer to a plain question."

A firm issuing a great deal of printed matter may decide that in every pamphlet, book, or newspaper advertisement the price of each article

shall be stated in the matter relating to it. This is a sound policy.

But, where the articles sold are numerous and several of them are advertised in an indirect way, that is, with paragraphs or pages of arguments and descriptions about each, the purpose of the firm is scarcely well carried out unless there is also issued a simple, clear price list from which everything is omitted but descriptions, prices, and terms.

Such a price list in some cases can be a page or several pages in the beginning or end of a more general pamphlet, or it can be a publication in itself; but the main point aimed at is that the eye may be able to take in simply the necessary facts about each article, and, where many nearly similar articles are being offered, the comparative prices and descriptions.

A price list should observe uniform rules as regards arrangement, so that a glance down the pages will reveal all prices as being in the same type.

In the price list where each article named may occupy only a line or so of description and a page can contain the list of scores of articles, this method is obvious. But there are some lists where description must be fuller and where illustrations are necessary or desirable, as, for instance, lists of costumes or gramophones, motor cars or pianos.

Here, a half, third, or even a whole page may need to be given to each article, so more care must be devoted to maintaining the value of comparison in a price list.

This can be done by printing the name of the article and the price in uniform bold type in the one unchanging space on every page.

The point is that the buyer, looking at the illustration of a car at £645, decides: "I want something cheaper."

As swiftly as he turns the pages he can read of cars at £600, £500, £380. He knows where to look for the price in each case. He will meet it exactly in the same spot on each page, and printed in the same type.

Similarly in the price list of, say, coats and costumes. These pictures may be printed three or four abreast on the same page. But if one line, say 1 in. from the foot of the page, be steadfastly reserved for the price and a similar line at the head of the page for the name, and uniformity of type be maintained, an advantage will be gained.

Coats and costumes are specially mentioned because, of all the people who issue price lists, drapers are most tempted to fall into error. A draper's price list usually errs on the side of being too crowded, and in the effort to economize every inch of space, a task is often set to the reader involving some patience when it is desired to compare one price with another.

The reason for this is obvious. The draper advertiser, accustomed to pack as much as will go into a newspaper corner, gets into the habit of closely arranging his advertisements everywhere. It is probably a wise act to get the full advantage of costly newspaper space, but one of the chief values of a price list is lost when the same policy is adopted.

## Price Lists with a Double Purpose.

Printing is expensive. This fact influences some business firms to endeavour to make one list answer two purposes: that simultaneously it may serve to be the statement of prices to the trade and also be of use for the general public.

This is done by means of pricing all articles at the sum that is to be obtained from the ultimate buyer, and allowing the retailer or distributor a discount that shall cover his expenses and provide his profit.

Thus, a manufacturer of brass bedsteads finds it is necessary to issue an illustrated list showing each article in rather clear detail. Even for the purposes of selling to the trade, it is desirable that the list shall be well got up and printed in excellent manner.

It is found that the middlemen who are the customers of the firm are better armed in selling to the public when they have a similar price list, as it is impossible for them to keep all sizes and qualities in stock.

What more obvious, then, that the one price list shall answer the double purpose? Methods of trading differ in differing cases, but a convenient method is for the list to state the retail price in each case and the middleman to take his gross profit in the form of a discount.

In certain trades, this plan works excellently. Especially is this so where manufactured articles are being handled and a costly catalogue is an almost necessary part of a selling campaign.

But where prices are fixed by ordinary laws of supply and demand and there is an open market, the plan is ineffective.

Some years ago a firm in the North brought out a number of foodstuffs and arranged its lists in this way. All articles were invoiced at selling price, and a trade discount of 17½ per cent was available for the middleman.

In theory, the plan seemed excellent. In practice, it broke down. The salesmen had no difficulty about selling one or two of the lines offered which were advertised brands, but when it came to articles that fluctuated day by day in the wholesale markets, the salesmen were practically out of business, for their price list had lost that elasticity that is necessary for such trading.

In effect it worked out that the firm did business only in its unbranded lines at those times when the market prices were high, and there was an advantage in buying from them.

From the price list point of view their system was unnecessary, as the whole of their list could be printed in a four-page leaflet and illustrations were not required.

## Retail Price Lists.

The list that deals in one class of goods, as, for instance, groceries, can be printed on the alphabetical plan. But where there are many departments, this method is not advisable. To have make their lists a source of revenue instead of a cost.

## Illustrations for Price Lists.

Wholesale and manufacturing houses frequently supply their retail customers with process and line blocks illustrating the goods offered. As pictures are a necessary part of a catalogue in many cases, it is useful to take advantage of this source of supply.

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A Modern Retail Stores

various similar commodities scattered through a long list is perplexing.

The divisions, however, need not be too numerous. Groceries and provisions might be lumped together. All departments of draperies might be similarly treated, however they be divided for trading purposes and convenience of floor space in the actual business. Furniture and carpets make a section.

The price list of a retail business is often a very desirable advertisement medium, and manufacturing firms will frequently pay good sums for the insertion of matter. Many retail firms

Many of these blocks will be in "half tone," which will not reproduce on rough paper. This is a technical point for which the compiler of a price list must be prepared. Desirable as a pleasing feather-weight paper may be for some purposes, a draper is almost forced to choose one of finer texture in order to obtain a good effect from his pictures. Line blocks will reproduce on any paper.

Where the trader is himself obliged to have the picture made, it is desirable to get into touch with an artist accustomed to such technical work.

An illustration used for commercial purposes

should convey precise information about the selling details of the article pictured. The ordinary artist may not realize that the picture of a shoe, for instance, should reveal the width of welt, the lines of the instep, and similar points.

The picture should be executed in view of the method of reproduction. Some articles show with excellence as pen and ink sketches for reproduction in "line." Others make better "wash" drawings. The former of these methods of reproduction is the cheaper, and, where copies are to be issued for use in other people's price lists, the better to choose, as there is less likelihood of careless and indifferent printing or the choice of unsuitable paper spoiling the effect.

ALBERT E. BULL.

## CHAPTER XIX

## DEALING WITH YOUR PRINTER

THE business man will not proceed very far before he meets the printer. Even before the business is opened there will probably be various printed announcements to be prepared—certainly in many cases there will be a catalogue or price list to be printed. The business man should, therefore, among his numerous other accomplishments, number that of at least an insight into printing methods. It is astonishing what a lot of difficulties are avoided and time and trouble saved by a slight amount of knowledge of, for instance, the recognized forms of presentation of the manuscript (or "copy," as it is called), and the rules for the correction of printed matter.

### Catalogues.

The preparation of catalogues is an important matter in many firms, particularly so in the mail order business. Just think what a catalogue is, and what it does. It is a price list, a circular, and (by no means least) an advertisement. As a price list it must be accurate as regards prices, as a circular it makes certain announcements and must be accurate as regards description of the articles mentioned, and as an advertisement it must *advertise*. Before it reaches the hands of the printer, there is a great deal to be done in the preparation of the manuscript. There is the writing of the preface or introductory note to the catalogue—an exceedingly important matter. This should be short, interesting, and attractively written in good English. The full list of articles to be included should be drawn up, with particulars of quality and price, each article preferably having a distinctive ordering number or letter. Then there is the matter of illustrations: in most trades, pictures and drawings add materially to the value of the catalogue. They should be included wherever possible, particularly so as the extra cost entailed is comparatively little. Terms of business, advice on ordering, etc., may come either at the beginning or at the end of the catalogue; and do not forget to include an index. This latter will be found extremely useful, even if only a very brief one. Then there is the cover: "neat and not gaudy" is a good rule in this connection.

### The "Copy."

Having collected together all the necessary material for inclusion in the catalogue, or obtained details of all matters to be mentioned in the circular or whatever it is that is to be printed, the person entrusted with the preparation thereof must write out the "copy" for submission to the printer, with a request for an estimate of the cost (if that is necessary), or for it to be set up in type.

The "copy" should be written on paper of fair size, on one side only, with a margin of an inch or so. Sheets should be numbered consecutively and, when finished, fastened together loosely so that, when in the printers' hands, the work may be parcelled out to several men, if that is necessary to hurry forward the work. In writing out the "copy," it is advisable to bear in mind the following—

The matter should be typed, if this is at all possible.

When alterations are made (at any rate, extensive ones) it is far better to re-write the whole page than to run the risk of inaccuracies in the printing.

Abbreviations should not be used.

In indicating any particular type which is necessary, the rules for marking are—

1. One line under a word means "print in italic type," thus: *italic*.

2. Two lines under a word mean "print in small capital letters," thus: SMALL.

3. Three lines mean large capitals, thus: LARGE.

4. A wavy line means heavy type, thus: **HEAVY**.

Full instructions should be given as to the style required, and a general idea of the arrangement indicated.

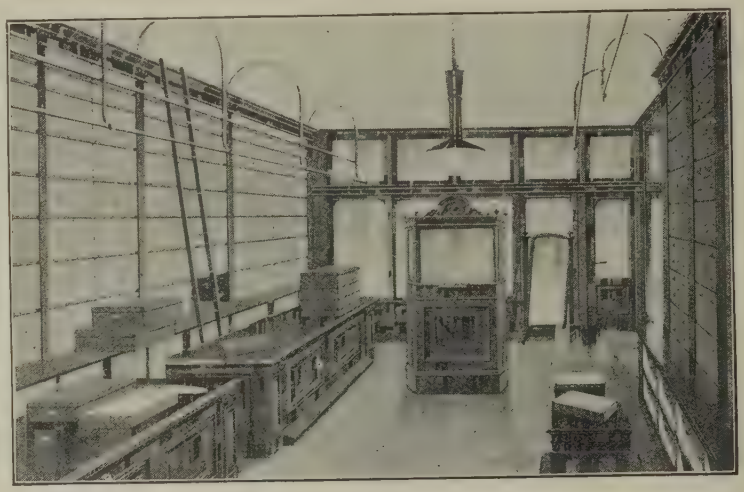
### Estimates.

All is now ready for submission to the printer. There are two attitudes between the customer and the printer; one of mutual distrust, the other of mutual trust. The first—the wrong attitude—shows itself in a beating down of the printer's price by the customer, with the natural result—a lower standard of work by the printer. And that is false economy, indeed. It cannot too strongly be emphasized that, to secure the best result (the result that pays in the long run), intelligent co-operation is necessary between both parties. Therefore, make a friend of a trustworthy printer.

If it is a catalogue that is the subject of the printer's estimate, he will, when submitting his

price, send a "dummy" catalogue showing the kind of paper to be used for cover (or wrapper) and inside pages. This "dummy" is very useful as showing the "bulk" of the catalogue, and its weight—the latter very useful information for arriving at postal charges, if the catalogue is to be distributed through the post.

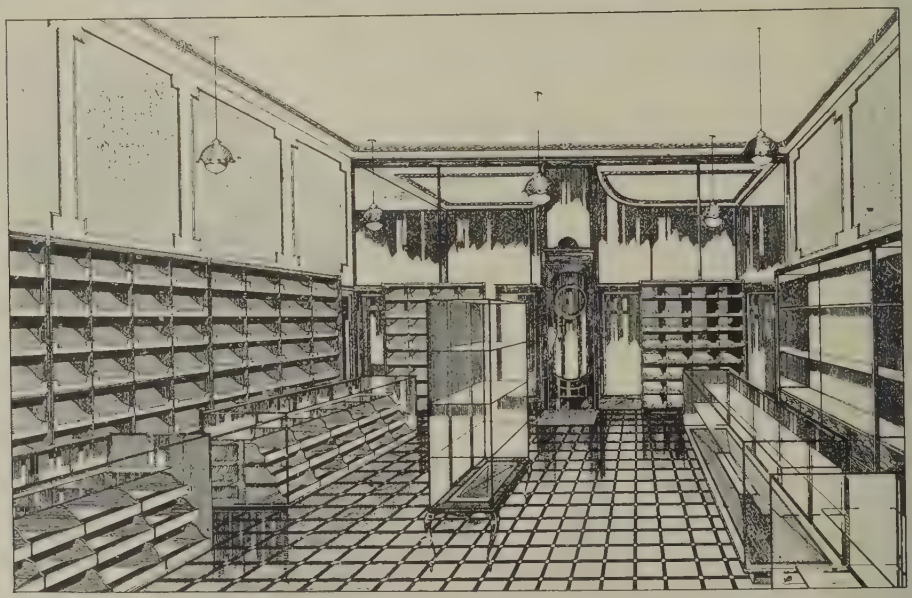
The great essential in a circular or catalogue is legibility, and this being so, it is suggested that on no account should various kinds of type be crowded into the same circular or sheet. Choose a good, plain type and stick to it; fancy "artistic" types are to be condemned for ordinary printed matter. Do not overcrowd the printed page—learn the use of white space. And, a final word under this heading—do not overlook the fact that the quality of the paper used is a most important factor in the appearance of printed matter.



## Printing Methods.

This is hardly the place to deal fully with the printer's art, but a few very brief notes may be useful. If the customer knows something about printing, the more intelligent will be his co-operation in the production of the best work.

Briefly, then, we may say that there are three main methods of



*By permission* *Stanley Jones & Co., Ltd.*

THE REFITTING OF A SHOP INTERIOR

Upper photograph shows the old interior (all stock hidden). Lower sketch shows interior after refitting to give a maximum of display.

printing: Relief, or letterpress printing; lithographic or flat surface printing; and intaglio printing. Then there is what is called the offset process, which is a combination of the three.

Relief printing is ordinary printing from type, the type having a raised surface which is inked by revolving rollers. Lithographic printing is based on the fact that water makes no impression on grease. The illustration or design is drawn in reverse in greasy ink, and this is then transferred to a stone or plate which is afterwards rolled with water. The result is that the surface, with the exception of the design in greasy ink, is moistened, so that when an inked roller is made to pass over the stone, only the greasy parts take up ink, and so the finished print is obtained. In the Intaglio (pronounced "Intal-yo") method, the design or lettering is cut or bitten with acid, i.e. etched, into or cut out of a metal plate in reverse. As the ink fills in the cuts, a slightly raised surface is given to the printing, as will be noticed, for example, in the case of the usual kind of visiting card.

The manuscript is first set up by the printer in a "galley," which is a shallow tray of wood or metal to take the set-up type before paging.

The above notes on printing are necessarily exceedingly brief, and the trader who wishes for more knowledge on this matter, and who does not wish actually to make a study of its theory, should take an opportunity of visiting a printing works.

## Passing the Proof.

When the order has been given, the compositor will set up the matter and take a proof (known as a galley proof or slip proof). This is handed to a reader in the printing office, who corrects it and returns it to the compositor. The latter then makes the corrections necessary in the type, and pulls another proof (known as a first proof), which is sent to the customer. This should be carefully corrected in accordance with the recognized method of proof correcting (dealt with above), and returned to the printer for paging or for second galley proofs. It is useful for the customer, in the case of a catalogue or book, to paste up a "dummy" from the galley proofs, being careful to place any

~~Press~~ ~~Corrections~~.[1]

The association of the people with the press,
which is every year becoming more and more
intimate by the general acquaintance and
cultivation of the art of composition, ren-
ders it necessary that everyone should
become acquainted with the ways of the
press so that he may be able to present
literary his productions to the public in
the correct form.

The revision of an article for a magazine
or trade organ, and the correction of a proof,
~~need~~ a knowledge ~~of the marks~~ of the
marks that are employed by ~~literary men~~
and press readers in revising and correcting
their work. The list of corrections here em-
ployed will be intelligible in any printing
office. The origin of greater part of these
corrections is obvious. Such words as
delete from the Latin deleo, to blot out,
carry us ~~us~~ back to the days of Elzevir and
Plantin, when nearly all *books* were printed
in Latin, and printers were Latin scholars.

EXPLANATION OF CORRECTION MARKS.

1. Change from lower case to CAPITALS. For SMALL CAPS write "SM. CAPS;" and for *Italic* write *It.* or *Ital.*
2. Commence a new paragraph.
3. Turn this letter upside down.
4. A letter of a wrong fount ("wf.").
5. Put a space in.
6. Wrong letter.
7. Insert a hyphen.
8. Too much space; put the words closer together.
9. Substitute a small letter for the capital.
10. "Delete" (take out).
11. Insert a comma.
12. Transpose these words (*trs.* = transpose).
13. No fresh paragraph; let the matter run on.
14. A space is standing up.
15. Put these letters straight.
16. Substitute the word in the margin for that crossed out.
17. See 10.
18. Let these words stand; they have been crossed out by mistake (*stet* = let it stand).
19. This letter is broken or battered.
20. Insert a full stop.
21. Some words have been omitted; refer to copy. Where there are only a few words omitted, they may be written in the margin. If the omission is a long one a reference is made to the copy.
22. Letter omitted.
23. Word omitted.
24. Close up.
25. Put this word in quotation marks; that is between inverted commas.
26. *Italic.*
27. See 10.
28. Transpose the letters.
29. Roman.
30. Substitute a capital for the lower case letter.

illustrations in their proper positions. When the page proofs are submitted to him, he should go through them very carefully, and not only look to see whether corrections in the first proof have been made. The whole thing should be gone through again. When finally passed, the customer has nothing more to do with the work until it is delivered to him in its final form.

It should be noted that the work involved in making corrections is greater as the job proceeds; so, to save money, as few alterations as possible should be made in the page proofs. And, in correcting, take particular care to alter as to cause the minimum of resetting of type. For instance, an added word may not only necessitate the resetting of the line in which it is to go, but several following lines may also be upset. Some people seem to have a great liking for correcting proofs, and no matter how many sets of proofs and revises are submitted to them, they always make corrections in them. Such people should learn the important fact that, as far as is humanly possible, all alterations of wording, etc., *should be made in the first proof.*

## Printers' Correction Marks.

There are certain recognized signs used in making corrections in proofs, and to save the time of the printer and to prevent mistakes it is advisable to conform to the usual method. These correction marks are shown in the facsimile of a corrected proof on p. 483, and are explained in sufficient detail at the side. It is recommended that all proof corrections be made in the margins. As mentioned above, when dealing with revised proofs the customer should not be content to verify only the corrections made by the printer in accordance with the markings on the first proofs, but should re-read the whole thing.

## The Completed Work.

Very little remains to be said. You have passed the proofs and must await delivery of the completed work. There are just a few remarks that are advisable in conclusion. Your catalogue, or booklet, or circular should have a prepossessing appearance and convincing manner. "It should be as persuasive as the most eloquent of travellers," says a well-known writer. A catalogue should contain all the information and explanation possible, in non-technical language. It should give the prices in clear type, making it plain whether such include cost of carriage or posting and packing. It should be such as to induce the recipient to send an order, certainly; but not only that—it should be such as to make him decide to "keep it for future reference."

SECTION 19

# Creating Sales by Window Displays

By G. L. Timmins
(Gold Medallist)

CHAPTER I

## THE PERSONAL ELEMENT

The small man in business is often apt to consider himself at greater disadvantage than he really is: often one hears the small shopkeeper remark that it is impossible to make his window displays compare favourably with those of larger stores, and window-dressers in small houses often feel that they have no chance to display their abilities. The scope may not be the same, the merchandise not so costly, nor the equipment so ornamental, but if big businesses are to be built (and undoubtedly big things have small beginnings), then it is up to the small shopkeeper, manufacturer, merchantman and their staffs to cease from continually making comparisons with others, and to set about getting more out of what they have, to create business rather than wait for trade, and to realize that the small man has a great advantage by being able to use personal influence—for undoubtedly the personal element is an asset to any business.

Builders of big businesses who have never let the size of their enterprise crowd out the personal element, have proved more successful in the times of trade depression, than those concerns that lacked that touch of personality.

### What is the Personal Element?

A visit to the wholesale or retail houses will reveal what is meant by *Personal Element*, for therein one finds "just what one expected of such and such a firm"—in one house, it may be expressed by confusion, untidiness, and lack of organization, and you feel inclined to ask "however did the business grow?" Keen prices may have been the feature, but hidden somewhere is a policy that has been the outcome of the personal element which has maintained some feature distinct from any other house. Had the same house been able to combine the personal elements found in others, and include with its value, organization, system, and displays that would have created sales, then the business would have been even greater. No one organization has yet combined the best features of every other business, and if the small man would realize this and find out the feature that best suits his particular trade, create features of his own, think for himself, adapt himself to circumstances and not grumble at disadvantages, but use every ounce of personal element that makes his business characteristic of himself, then, if he is a man of business ability, his business must of necessity grow.

### How to Express the Personal Element.

Your morning post often reveals the personal element of the house from which a communication is sent. Some letters you look forward to reading no matter what the nature of the business on hand may be; it is a pleasure to do business with their senders. Has it ever struck you what makes a letter attractive? As often as not it is the manner in which the letter is displayed, the make up, the balance, the colour of the paper, the size of the stationery, the way prices are quoted. Everything about the firm's communication is characteristic. All these qualities apply equally to window dressing, yet few, even those actually engaged in the work, are able to tell just what it is that makes a successful window display. One thing is certain, and that is the certainty of the necessity to put that touch of personality into window displays. Your shop windows are "read" by hundreds every day. Do they satisfy the public of your particular district? Is it a pleasure to look at the goods in your windows? Do the window displays create sales?

The small man who is out to build up a big business cannot ask himself these questions too often.

### Knowledge of Stocks.

By his knowledge of stocks the small man is able to keep in touch with the actual goods and with the requirements of his customers, and to buy special lines for window displays in sufficient quantities to make the display attractive. The point of sufficient quantities is rather more important from the display man's point of view than is generally understood. It is not an unusual occurrence in some houses to give orders for the window dressers to make a special display of some particular line, the quantity and colour of that particular line being quite unsuitable for the size of the window. Take, for instance, the Piece

Goods Department of a departmental store about to feature a *special silk sale*. The display manager makes arrangements to devote two windows to this section, and this space meets with general approval. He is informed that there are ample

Fig. 1

stocks and an unlimited range of shades; price tickets are ordered, advertisements drawn up, and the day for making the window display is arranged; but the result of such organization is not always so successful as one might think. The reason may be that the unlimited range of shades consisted of all more or less one colour, the silks in question were suitable for only very limited uses, the price tickets clashed as regards colour, and were out of proportion in size, and (further injuring the reputation of the house and the display manager) huge unsightly window posters announced the sale. The man in a smaller way of business would have had the whole matter under his personal control, and could have avoided such mistakes, devoted one or two windows to a silk sale, and have made a better impression.

## The Display Department of Large Houses.

In most large houses of retail trade to-day there is the need for better organization as regards window dressing, and a closer co-operation between display publicity, press advertising, and the manufacturers and buyers. Full possibilities of

building up business from window displays will never materialize under haphazard methods; the example of the "Special Silk Sale" is by no means uncommon, and a look at the window displays of many large houses reveals that discord of organization. It is only where the display manager is working along co-operative lines that it is possible to get the most out of display publicity, and this expresses the personal element of the house by representing the firm's ideals in well-defined schemes of window-dressing.

## A Definite Object.

Each and every window display should be made with a definite object in view. Select the goods, then the object, and make an aim to express it. Goods for a window display come under one of three classes—

1. Things to eat.
2. Things to use.
3. Things to wear.

From any of these classes it is a great error to choose only the things that appeal to one's own individual and particular taste. Often much selling force is lost by buying and displaying only those things one likes oneself. It, therefore, becomes very necessary to study the local conditions and the class of people for whom you cater. Then comes the object in mind; that must be expressed. Utility of the goods covers all three classes, and the window display in which the aim has been to express some particular use or novel purpose to which the goods may be put, is bound to be creative of sales.

## A Wash Goods Display.

Fig. 1 illustrates an effective wash goods display. The material is draped from the edge of the washtub, the display being made with the definite object of demonstrating fast colours. Note the three "pucks" representing butcher, baker, and candle-stick maker—also the "cold potato," linking together the nursery rhyme "Rub-a-dub-dub." The scheme is an original one—inexpensive and made in comparatively small space.

The small man will often remark, "but my windows are too small to give demonstrations of the uses of my goods," and considers himself so handicapped that he really never enters into window dressing enthusiastically. The man who always considers himself handicapped and sticks to traditional methods, sooner or later dies of tradition. No window is so small that it is impossible to demonstrate usefulness, and to create demand. The suggestion in Chapter II will be found helpful not only to the small man but to others whose frontage includes small and shallow windows.

CHAPTER II

# THE POSSIBILITIES OF SMALL WINDOWS

Many small houses are getting enthusiastic over window dressing, and some traders who for many years did very little dressing are to-day fast realizing that increased trade is to be made by effective displays.

## Proof of the Goods.

All over the world thousands of distributing houses are adding to their window space with successful results, proved by the fact that once extension or alteration is made to acquire more window space, it is never changed back to interior floor space. Window dressing is only in its infancy, it is a promising gift to business, and will develop quickly. Watch, therefore, that rapid growth does not exceed the expectations of the general public. Every business, large or small, must back up its window displays by truthful representations of goods and values.

## How to Dress a Small Window.

A small window dressed in the so-called stock idea of masses crowded from floor to ceiling, appears smaller than it actually is. A low-built window appears dwarfed by placing tickets on goods in horizontal lines; and rows of parallel lines should be avoided. Dressing a small window along vertical lines, keeping the tallest groups of merchandise to the rear, adds considerably to the depth. The small shop window display should endeavour to emphasize how big the shop is—not how small.

## Doorways.

Do not try to shut people out by dressing the doorway, or by sticking stuff all over the glass door. You may sell a dozen articles from such dressing out—but stop a hundred people from looking in.

However short you are of window space, *keep your doorway clear*, clean and inviting, and make attractive displays inside the shop.

## Adopt a Modern Idea.

The continual dressing of stock windows takes up too much time. Even the small window will use up too much of the stocks of a small house and not allow for an entire change of goods. Better dress the small window three times a week and show to advantage three distinct lines, so creating additional sales, than change the window once a month, showing twelve lines at a disadvantage.

## Added Depth.

Backgrounds can be used to great advantage in shallow windows, and give the appearance of

great depth. It should always be borne in mind that it is necessary to have a background or panel effect in keeping with the class of goods for sale, and it is better to employ backgrounds that tend to create the desire to possess the goods, than have too elaborate a setting and so distract attention from the merchandizing efforts. Beautiful backgrounds do not compensate for poor window dressing, and the first consideration should always be the right goods at the right price, shown in symmetrical balance and good harmony.

The background illustrated below was designed for a shallow window in which was displayed articles suitable for Christmas gifts and easy to send by post. The display was made to encourage early shopping.

The postman (worked on a lever and swivel) passed down the street and disappeared at intervals. This background design was executed by Mr. F. R. Hall, the Leyton draper.

Fig. 2

Fig. 3

Another background illustration showing how depth can be added to shallow windows, is shown in Fig. 3. It formed one of a series of Christmas attractions, designed and carried out by Mr. F. R. Hall, the Leyton draper, and is reproduced with his kind permission. The children in the background were worked on a wheel, passing the bushes in the foreground, and disappearing at intervals. This background expressed the Spirit of Christmas, and attracted much attention to the window displays.

## CHAPTER III

## WAYS AND MEANS OF CREATING SALES

Some goods of necessity have a ready sale irrespective of how they are displayed; hence, the small self-satisfied shopkeeper who thinks he sells plenty of the goods from his window—and

*Photo* *Kealeys Ltd.*

A DEPARTMENT OF A LARGE DRAPERY STORE

(The Savoy Tailors' Guild, Ltd.)

*Frontispiece*

his displays are seldom changed; the type of shopkeeper who devotes his window space to keeping stock that is seldom wanted inside the shop. To build up big business, it becomes necessary to create sales.

## Selling Direct from Displays.

How is this to be brought about ?—by educating the masses as to the advantages of buying the particular goods shown, and by encouraging prompt action on the part of the general public by showing the advantage of buying to-day. This can be demonstrated by window displays that give expression to economy, labour saving, care, rest, comfort, and many other things that go to make life more pleasant. Prompt action can be created by keen values, consistency, and truthful expression. Once the public have confidence in the methods of a certain shop quick action follows. Advertised dates of sales are a weakness of most small shops. The last day of the sale is usually indefinite, or comparative values are quoted too high, reductions are not truthful, public confidence dwindles away, and window displays cease to arouse interest.

## How to Arouse Interest.

Some wholesale houses and distributing agents are always ready to aid the retail in window-dressing, issuing much advertising matter, show cards, and mechanical devices, but very few of these are utilized to the best advantage. Advertising literature is invariably wasted and indiscreetly circulated in the district. It is only where manufacturers employ the services of experienced display men, that the best efforts are made to arouse public interest.

## The Drawing Power of Shop Windows.

It is very important to know how at small cost the small trader can add to the drawing power of his window.

The aim of the small man should be to create original ideas, to attract by striking some new note that will appeal to "his" public, as distinct from utilizing the ideas broadcasted throughout by agents and manufacturers. No trader should have such a narrow outlook that, having struck one original idea, he must go on using it for ever. The trader should adopt a broad outlook—if you help another trader, you incidentally help yourself to become progressively alert to think out another scheme.

## Dressing Windows at Night.

By changing windows at night, and having entirely different displays each day, it naturally follows that the same people who became interested one day will be curious to know and see what is showing the next. Window displays made with the blinds drawn arouse curiosity, but it is bad policy to have the blinds drawn during shopping hours. "Stunt" windows and installation of backgrounds that occupy much time are too costly for small traders, who must with limited window

Fig. 4

space avail themselves of the opportunity of having something to sell always on show.

A small window should take very little time to dress—that is, actual time in the window—but

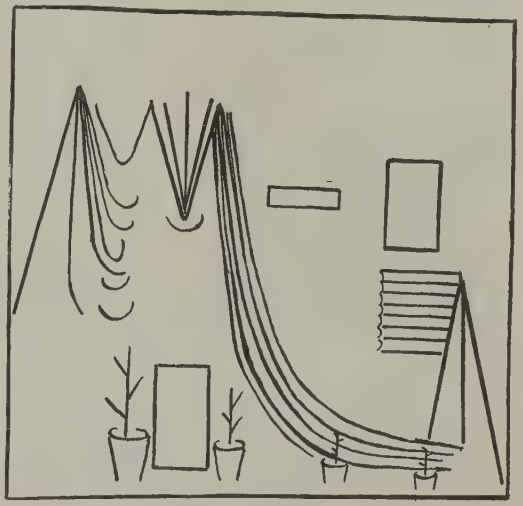


Fig. 5*a*

arrangements should be made to have everything ready beforehand; goods mounted if necessary; stands, tickets, and everything in readiness for quick clean-cut window displays in the shortest possible time. It is surprising how soon people become attracted by quick action on the part of the window-dresser, and how long people will watch the window at a shop that gives expression to movement, and by its ever changing displays arouses the interest.

The "stunt" idea illustrated in Fig. 4, was used in connection with a sale. The whole of the merchandise was cleared out of the windows, which were left perfectly empty, with the exception of the boards and tickets as shown in illustration. These latter were in the windows at 6 p.m. on the first day of the sale. The windows were re-dressed at night with the special lots, and good trade resulted the following day.

FIG. 5*b*

Another "stunt" window idea that created interest is shown in Figs. 5*a* and *b*, and gives expression to the growth of business—attributed

in no small measure to the desire to sell at the lowest current prices.

## Civic Pride.

Look at the shop windows as a whole in any town to-day; not all traders have yet realized the importance of civic interest and pride. Dirty, untidy patches in any business thoroughfare are a hindrance to the building of big business, yet if each trader took his share in keeping well lighted, clean, smart shop fronts, and co-operating with his neighbour in taking a civic pride and interest in his town, the result would be more cheerful people out and about. The great influence the shop windows of a town have as regards the growth and prosperity of that town, cannot be over-estimated. The local shop windows are an index to the civilian life of every borough, and speak volumes as to the advisability of intended investors speculating in the locality. Co-operate, start a movement in your own town, and see that your shop windows reflect a prosperous town in which there is unlimited scope for the development of industry. The small man should start forging ahead to-day, creating sales direct from window displays, and stimulating the trade of the town by his abilities and civic interest.

CHAPTER IV

# COMPOSITION IN WINDOW DISPLAYS

THE importance of composition is not regarded seriously enough by most window-dressers. Knowledge of colours may to some extent make up for what is lacking in composition, but a successful window is one which brings together merchandise in an artistic manner and consists of goods which, as a whole, present a pleasing design. The whole presents a good scheme, which attracts attention. Nothing should be placed in the window by mere chance, and it may be considered safe to judge a window display in the following manner. Take any one article from a good display, and the composition is lost; in other words, the picture lacks something. Add one more article to a completed composition, and the window display becomes over-done in some particular place.

Composition is not nearly so difficult to understand as may at first be imagined, and the illustrations in this section will give the definite lines of such composition. All window displays are made up of straight or curved lines, and it is the bringing together of these lines in correct proportions that results in business-like window displays. A window display made up entirely of curves or complete circles does not cause concentration of thought on the part of the window shopper. A window display made up entirely of horizontal lines gives the window shopper the impression of calmness and tranquillity. A window display made up of entirely vertical lines is suggestive of ambition and enterprise, but it is always advisable to combine a few curved lines that add grace and beauty, and a few horizontal lines to bring the window shopper's mind back to "earth"—in other words, back to the goods. A desire having been created by enterprise and beauty of the particular line, the sale direct from the shop window is the accomplished result that is to some extent brought about consciously or unconsciously by a composition that is pleasing to look at. These rules are just as important for interior decoration for house furnishing, and every branch of art.

Pictures by great Masters and the buildings of our great cities reveal these lines of composition, and make interesting study for those who would become efficient in commercial display. Many window-dressers, or to use the more dignified and fitting name, display men, frequently visit the art galleries and museums in search of inspiration applicable to modern demands of commercial art.

## Balance.

The question of balance enters very much into all window-dressing. No matter what class of goods it may be necessary to show in the windows, the manner in which they are set out should more or less balance. No two display men strike the same effect of balance; in dressing windows with identically the same class of goods it is invariably found that each individual works to a scheme of his own imagination, which is exactly how a good display man should work. But a little instruction as to the various ways in which balance can be brought about will no doubt be useful and helpful to the beginner; and the most experienced can yet learn more about commercial display.

## Symmetrical Displays.

Art is very rarely expressed by precise design, that is to say symmetrical balance. Nature affords many opportunities to study the beauty of things that are not precise. A beautiful landscape may be pleasing because one side of the picture is made up of objects entirely different from those of the other; and the formation need not necessarily be exact to present a pleasingly balanced scene. To the beginner, straightforward, symmetrical composition is the best method to adopt, and carefully carried out, a window display along these lines is usually satisfactory. Equally important to the question of balance in window-dressing, as regards the goods, is the placing of the tickets. Chapter V more fully treats arrangement of tickets, and the illustrations in that chapter will help the reader to appreciate method in the composition of all branches of window work.

### Unity of Display.

Most shops having a run of six or more windows lack unity of display. The methods employed in one window are different from those employed in the other windows. In some cases the height of the dressing varies to such an extent that it seems hardly credible that the whole of the display belongs to the same shop. It is advisable to adopt some method applicable to the particular class of trade and goods that will link up one window with another, and yet give character and distinction to the business as a whole. One window should help another, and the best results in this direction can only be brought about by placing the window-dressing section under the charge of a competent display manager.

Commercial displays may, generally speaking, be classed in two categories—

(1) Window displays made with the object of creating direct sales.

(2) Window displays made with the object of creating interest, and arousing sufficient curiosity for the window shopper to enter the establishment and price the goods, and more probably select from those to be seen inside the shop.

Each of these two forms has its own particular merits. The question as to which it is best to adopt can only be decided by those who have full knowledge of the class of business and the adaptability of the establishment to conduct the business in accordance with the demands of either system. The first (in which the goods are priced) is more suitable for the average shop. The second (in which price tickets are not used) is suitable only to very high class, extreme trades, and to big stores that, to compensate them for any loss of direct sales, have a " go as and where you please " policy of which thousands take advantage and so walk around the interiors more closely inspecting the goods.

FIG. 6

## CHAPTER V

## THE USE AND THE ABUSE OF TICKETS

THE question of price tickets enters very largely into commercial displays that create direct sales ; price tickets that bear, in some uniform style, the actual selling prices of the articles displayed in the windows, are productive of more direct sales than those window displays that show articles for sale to advantage in a dignified manner without price tickets.

In helping to build up big business from small beginnings, price tickets have considerable value. The use of price tickets does not unduly interfere with the artistic side of commercial display, providing discretion is exercised with regard to

size, shape, types and placing of the tickets. Figs. 6 and 7 show well placed tickets.

Many business houses and display men are getting "too house proud" over the ticket question, and do not use sufficient price tickets. On the other hand, by far the greater number are not dignified enough, and their displays, by reason of the abuse of tickets, present a "cheap-jack," unsightly appearance.

## The Purpose of Tickets.

Every show card or ticket used in a window display, should, in the same way as the goods, be there for a definite purpose. Tickets need not necessarily announce price and nothing else. They may be used to educate the public as to the value of the goods, nevertheless such phrases as "cheap," "very smart," and "the latest," used without discretion, soon cease to have any meaning. Value can be expressed in many ways. In the first place by pricing your goods in the

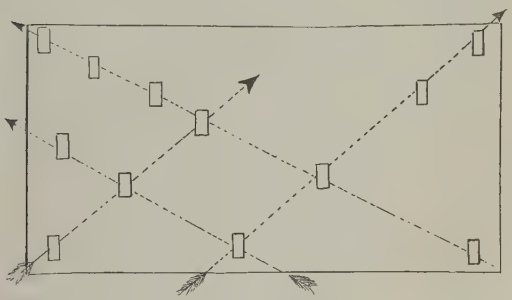


Fig. 7

window, people gain confidence and feel assured that you are not ashamed of your values. Therefore, never over-estimate the value of an article by misrepresentation on the ticket in the window. Use tickets discreetly, and above all, use clean tickets. If you have a special line to offer the public, and that line merits window space, then it most certainly merits the cost of a special "ticket" to express the particular advantages of the line. Do not be content to patch up some old tickets, but have a ticket made of a relative size, shape and design to the goods. Be careful to quote exact widths, recent prices, sizes, etc., and pay particular attention (in the case of piece goods) to stating whether a material is "All wool," "Fast colour," or "Pure cotton"; in short, be truthful or say nothing. There are many opportunities to educate the public by the use of tickets; the origin of the goods, the process of manufacture, and the utility of an article all afford opportunities for the use of neatly worded tickets that will serve to create direct sales, and increase the public interest in your windows.

## Tickets of Unusual Wording.

It is not necessary to stick to stereotyped tickets, and it is advisable to use, at intervals, tickets of unusual wordings which link up some topical event and have an indirect association

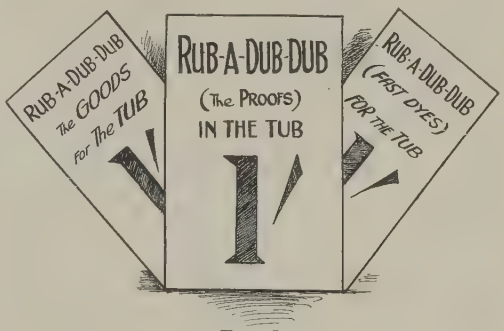



Fig. 8

with the goods offered for sale; these help to stimulate the interest of the window shopper. The tickets used by a progressive trader in a recent display will best serve to illustrate this point. (Fig. 8.)

## Examples of Ticket Wordings.

In drawing up a list of suitable wordings for all trades, it is only possible to offer suggestions and give a trend of thought to the business man which will enable him to think of wordings that are suitable to his own goods. The failure of stock phrases is obviously due to the fact that they are everybody's property. No ticket should be used unless it "fits the goods"; do not fill up the window space with certain goods because you happen to have suitable tickets, but show suitable goods and have tickets made for them. The following list will in a general way suggest phrases that have meaning, and will assist in creating sales. The very best tickets are those that give the public information concerning the articles for sale.

General. The goods are new; get it to-day; quality first; just enough to go round; the value is right; bought in bulk; here you are assured of quality.

Displays of boys' clothing will be made more interesting, and attractive by the use of tickets that give expression to the firm's readiness to supply the particular needs of the boys, using tickets worded on these lines—

Play suits—the rough and tumble kind; the best in the long run; these suits are in a class by themselves; end of term suit sale.

Boots and Shoes. The descriptive tickets for the shoe display should emphasize comfort—

Assured comfort; comfort and good wear; timely for tennis.

UNDERWEAR. Tickets used for underwear should express warmth or coolness of texture of the particular make, for instance—

Defy winter winds—wear wool; cool clothing for warm weather.

FASHION GOODS. Frills—fashion's fancy; the style that is predominant; the new modes are here; vogue and value; new fabrics—new shades; brighter goods for "brighter London."

SILK HOSIERY. For sheer smartness; flock here for wool hose.

SALES. Standard qualities at unusual prices; these will be "Mopped" up quickly (*for mops*, etc.); surplus stock sale; the price has tumbled; the value has risen.

FOUNTAIN PENS. Better pens for better writers.

WASH GOODS. Fast dyes for the tub.

CORSETS. The tickets used in corset displays should suggest the necessity of having special corsets for various occasions—

CORSETS—Suitable for wear with evening gowns.

CORSETS—Giving free and easy movement for athletics.

CORSETS—Giving the necessary lines for fashionable tailor mades.

Neat descriptive tickets can be used to advantage for both window and interior displays, and will convey the special features, emphasizing also the correctness of fitting.

OIL STOVES, ETC. Service at the right price; odourless oil stoves; labour saving; economy in price and labour.

HABERDASHERY. Tickets that remind the window shopper of the things one is apt to forget can be displayed to advantage in windows showing such articles as cotton, needles, etc—

Mend it to-day; a stitch in time saves nine; early show for the winter sew.

ALARM CLOCKS. Reliable clocks; selling like "1 o'clock"; "it's nice to get up in the morning."

UMBRELLAS. Don't borrow—buy one; sound umbrellas for broken weather; welcome showers—but keep dry.

It will be noticed that the phrases here suggested have some direct bearing on the particular goods. It is detrimental to business to use indiscriminately worded tickets and tickets giving unnecessary words.

Reference should be made to Section 23, SHOW CARDS: THEIR DESIGN AND PRODUCTION.

## CHAPTER VI

## LIGHTING THE SHOP WINDOW

EACH trade calls for particular treatment in the matter of lighting the shop windows. The exclusive trades may adopt with success many elaborate and artistic methods of electric lighting, costly chandeliers, or semi-opaque marble bowls; these give a touch of beauty and dignity that adds grace and charm to the merchandise in the high class shops.

Big businesses that rely on window display to create sales have developed into two classes. Some establishments call attention by reason of their brilliantly lighted windows that seem almost too bright, and tend to detract from the goods or leave the window shopper overpowered with the brightness of the light. This creates in the minds of shoppers a suspicious feeling that the object of the lighting is to make the goods appear "better than they really are." It is certainly a display man's job to get the best out of the goods he has to display, but it is not good policy to use the trickery of other crafts with a view to misleading the general public by misrepresentation of the goods. There is a vast difference between a brilliantly illuminated window and a well lighted one. The latter policy, that of sufficient and evenly distributed light, is the best and soundest to adopt in the building up of a bigger trade from the show front.

There can be no set rules for window lighting, because the arrangements for lighting in one trade are rarely successful when applied to another. Those methods which can advantageously be employed by the butcher are far from suitable to the draper. It is foolish to endeavour to outshine your next door neighbour, whose shop may be brightly illuminated by high candle-power lamps. The shop window that is distinctive by reason of its contrast to the surrounding ones is always the most attractive.

The methods of illumination of window displays by the use of outside lamps are now giving place to the use of concealed interior window lighting. The arc lamp method of lighting is costly, and much of the benefit to be derived from such lighting is shared by competitors, and the general distribution of such illumination is such that only a very small percentage of the light is concentrated on the show window. The scattering of illumination is apt to react on the mind of the shopper, who becomes bewildered in a maze of bright light, instead of absorbed in the beauty or the usefulness of the goods in the windows.

Illumination should be employed not only to light the windows, but to draw the shoppers' attention *within* the plate glass of the shop front, rather than light up the things that have only outside concern.

There are many problems that arise in connection with show window lights, and not the least of these concern "island windows." It is often advisable to have a second ceiling of dull glass to such windows, and so conceal the lighting installation, and distribute evenly the candle power lamps.

A night photograph of a window display illuminated by some indirect lighting will give correct details of the distribution of light, and show all dark patches or other deficiencies of the scheme. Often the reflectors are not hung at the correct angles; this results in the window appearing much smaller than it actually is, by reason of the light being distributed at too low an angle.

## Light Plugs.

It is an advantage to have a few extra light plugs in all windows. There are many uses to which they can be put, especially when showing lamp shades, electric fans, heating installations, etc., which call for many demonstrative displays.

## Coloured Lights.

With very few exceptions, coloured lights are not big business builders, and for window displays the general use of coloured lighting is not advisable. Certain trades, such as confectionery, may at times use to advantage coloured lighting effects, but effects which present a theatrical appearance do not tend to stimulate trade. Any scheme that leaves the window shopper more impressed by the marvels of a craft with which the actual goods are not directly connected, than by the articles for sale, is not productive of sales to the fullest extent.

## Illumination by Night.

Look upon window space as advertising space, and the window shoppers as circulation. Windows are the greatest advertising force by day, yet closing time with many establishments hides their wares "under a bushel." You pay for newspaper space, and you certainly pay for window space, so why not make the most of it? Why "ring down the curtain" when the doors close? Every advertiser expects the newspaper to benefit him after the shop is closed; and every shop window if properly dressed, is worth the cost of night illumination. In most districts, hundreds of people are out and about at night, free from the cares and worries of the day; out to think a little about what they would like to get for themselves, for others, and for the home. A man's thoughts may be of his car, his garden, his books, or his sport, and it will pay every trader to light up his windows and satisfy the curiosity of the hundreds who *pass by* simply because the blinds are down, but who would *stop* if the traders gave them the opportunity of viewing the window displays by night, when they have leisure to do so.

Assuming the local conditions did not merit the cost of illuminating the shop widows every night, it would be well to set aside two nights a week, on which the whole of the window displays would be changed and completed; advertise that on two certain evenings the windows will be a special feature, and watch results. It is improbable that any trader once adopting this form of publicity will revert to the old method of blinds and shutters.

## Time Switches.

The electrical illumination of shop windows after business hours is now possible at a minimum amount of inconvenience and at little cost, as time switches that will put the window lights on and off can be installed.

(*See also* Section 3, The Lighting of Shops, Offices and Factories.)

CHAPTER VII

# WINDOW POSTERS, ETC.

Depression in trade seems to produce more window posters, and most shopkeepers flock together like sheep in trying to revive trade. In making announcements through the medium of window posters it is very doubtful whether 10 per cent of the posters used are worth while, owing to their being indiscreetly worded or untruthful, or being used in a haphazard manner. The majority are absolutely meaningless, abounding in stock phrases that are everybody's property. There is little exclusiveness about the designs and colours, and one sees shop after shop announcing the same inducements to stimulate trade.

Owing to the economical cost of massed production, the window poster is perhaps the most overdone of all advertising ideas. To paste bills over the greater part of the plate glass tends generally to draw the attention from the goods.

## The Failure to do Good.

Insufficient care in choosing a poster of relative size to, and in harmony with, the goods, is one reason why the poster fails to achieve its object. Another reason is the unsuitability of the wording,

Fig. 9

and the failure to avoid long sentences. The poster shown in Fig. 9 was recently seen in use on a shop window; it is an example of wasted space, and would be quite useless to stimulate trade.

## Posters that Push Trade.

The window poster may be used as a means of educating the shopper as to the origin of the goods, and such lines as Oriental goods lend themselves to much artistic design. Atmosphere is often given to furs by the use of posters, which in some "snappy" way suggest winter. The four Seasons are each of them opportunities to add to the attractiveness of the show front by the addition of a well designed poster. Then comes the sale poster, that yearly grows in size and ugliness, often made the more so by the haphazard manner and the ungainly angle at which it is posted over the best part of the windows. The placing of posters calls for much the same care as that of tickets, and if posters are to be used, then they should be used as part of the whole composition of the window show, and not as an afterthought. Fig. 10 illustrates an incorrect, and Fig. 11 a correct method of placing posters, window bills, etc. Suggested posters are illustrated in Figs. 12, and 14.

Fig. 10

The poster in big houses is often a source of trouble between the display and advertising managers, and frequently results in a hitch between two departments in which there is every need for co-operation and better understanding.

The small shopkeeper with limited window space, must exercise discretion in the use of posters, and use window bills only occasionally. Goods should never take second place to posters.

The posters shown in Fig. 13 would have been good had the word "real" been avoided.

## Advertising Window Displays.

In building up a business it is surprising to note how few newspaper advertisements refer to the show window. Blunt phrases, such as "See the windows" hardly meet the case, and the small man will find it to his advantage to use a slogan referring to the window displays, such as—"The shop where the windows look different."

Items of an editorial nature may be written along these lines—

"It is frequently remarked that Hall's windows are constantly being changed. This is True. The changes of display every week are due to the quick selling of all goods, at the lowest possible price. The endless variety of goods stocked renders it necessary to add more window space, and to make even more changes of displays.

Every Friday, Saturday and Monday the windows contain a complete exhibition of attractively displayed articles, representing our huge stock of household drapery, etc."

Create interest in your window displays, and you create direct sales, and what is more, additional sales.

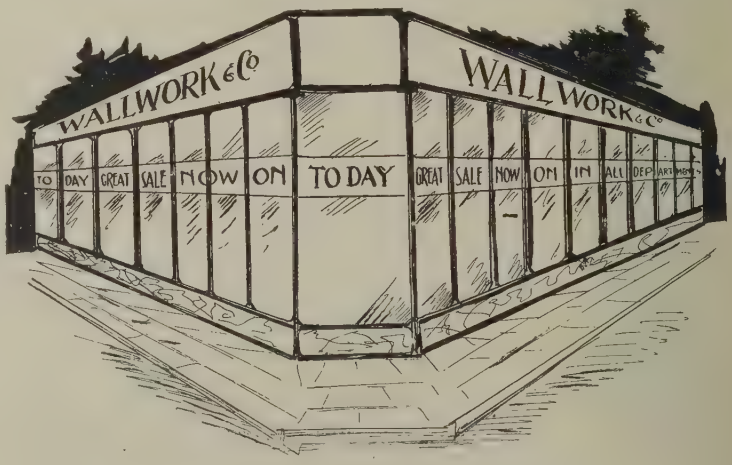



Fig. 11

CHAPTER VIII

## WORKING ALONG SYSTEMATIC LINES

In Chapter VII stress was laid on the definite manner in which, on certain days, a trader is able to advertise the completeness of his window displays. This in itself is sufficient intimation that system is at the back of such schemes. A system of window-dressing found suitable for one district may not be suitable for another.

Fig. 12

### American Methods.

The systems adopted by the American stores in U.S.A. have many points from which the English trader might derive benefit, but if adopted in their entire form they would prove failures with the English people. One of the most remarkable schemes adopted by the Americans with success is the "stunt sale window display," often termed "a window sale." The method employed is to devote window space to certain lines at one price. In the case of, say, a window sale of bags, the window would be dressed on Monday night on stock lines in units or groups of 500 or more bags of various designs, in all probability not two alike. The ordinary value would be shown on the ticket, and the sale announced to take place on the Wednesday, commencing at 8.30 a.m.

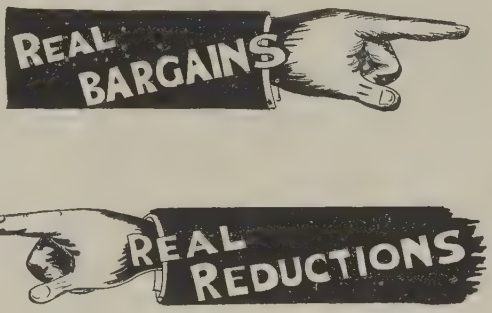



Fig. 13

This means that the goods will be on show all day on Tuesday, and the window lights left on until midnight. The windows would then be cleared, all the bags being carried into the department ready for Wednesday's sale, and on Wednesday morning in the bag window would be displayed an entirely different class of goods announcing another window sale for Friday. American

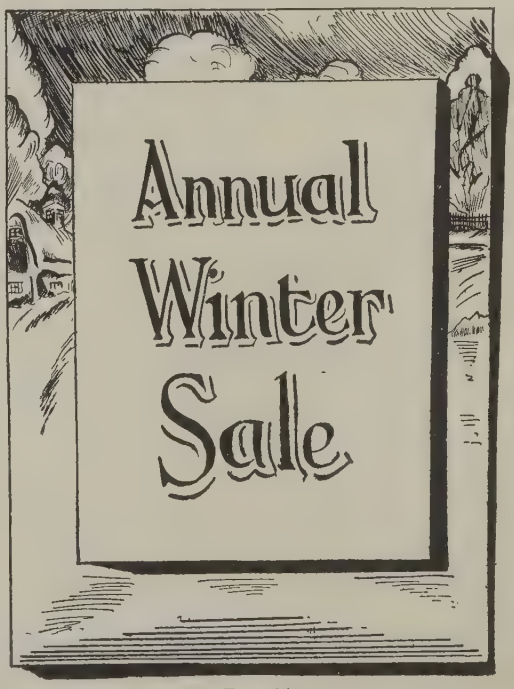



Fig. 14

and Canadian cities have many such sales, and offer remarkable values at a price to create quick selling.

This system certainly makes the very best use of window space, and while the sale of one line is in progress, another is being shown to the fullest advantage to the crowds that have been drawn to the sale of the goods previously shown in the same window space. In short, it makes double use of window space, and is instrumental in creating fuller sales.

### British Methods.

This successful idea from overseas would not be practicable to many of our shops, however, and the British people would need a great deal of educating up to the right point of enthusiasm over window sales, before such could be run successfully. Systems that will be beneficial to the English trader and the small shopkeeper are those that will truthfully tell the public just a little more about his business, and what they may expect of his goods and window displays. System means an orderly arrangement of objects according to some common law, hence its application to window-dressing. Do not make any system that is merely a convenience for yourself, but make a system that is suitable to the local conditions; find out the right days for the right displays, by watching the selling values of each display. It is not nearly so difficult for the small trader as for the large to estimate the sales from each window. Simple charts will help in this direction; they can easily be adapted, and make useful reference for future displays. They also show to what extent the displays are creating additional sales.

## CHAPTER IX

## COLOUR

VERY few business men have need for a scientific knowledge of the various explanations of the relations between the human vision and colour. Some elementary knowledge will always be found useful, for colour harmony becomes associated with very many branches of commercial undertakings. An eye for colour is one of the greatest assets to those engaged in the art of display, and it naturally follows that those who have no sense of colour values and colour combinations cannot hope to succeed in window-dressing.

### The Background.

The first thing necessitating colour in window-dressing, is the background of the display. We are not now speaking of a temporary or ornate background, but of the permanent structure of the window. For ordinary windows, such as are found in the average small shop and growing business, there is no colour so appropriate to the majority of goods as grey—a warm French grey with a flat surface. A point to be carefully considered is the reflection of glass. A dark window or bevelled glass will produce many objectionable reflections; a white background will reduce these considerably. A black background will add considerably to the reflection, and in many cases have the effect of a looking glass; therefore, avoid black if your shop is faced with reflections. Grey, being a neutral shade, will harmonize with most adjacent colours.

In case of a run of windows, it becomes necessary to study colour from a "far view," that is to say, from a distance at which the whole of the show front can be seen. The colour scheme of adjacent windows should harmonize. It is very frequently noticeable that sufficient care has not been given to the harmony of the whole show front.

### Colour in Various Trades.

Colour in display is no longer to be regarded as purely a question for the drapery trade, for colour sense is growing, and many who would in the old days have resented the idea of furnishing a room in only those colours that presented true harmony, have now adopted the modern idea of each room to a colour scheme. As colour is found pleasing

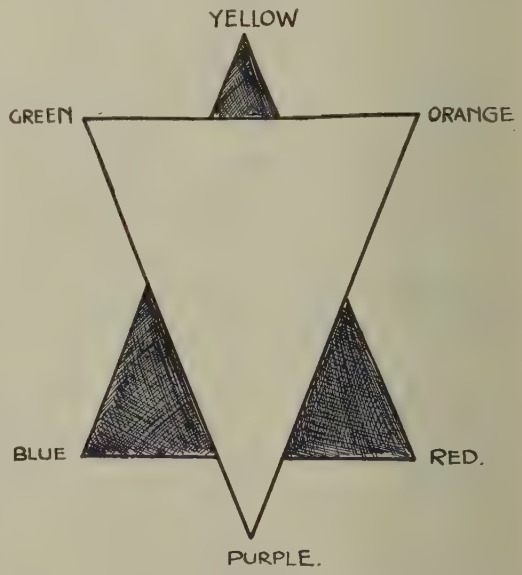



FIG. 15

in the home, and the younger generations are brought up amidst colour combinations, it naturally follows that it is looked for in the shop windows of every trade.

## Shoe Windows.

To present a pleasing show of shoes does not mean that it becomes necessary to use dozens of yards of material of harmonizing colours, and drape the whole of the shoe window and "stuff" each shoe with the same colours. Here the method is wrongly used, and only results in a gaudiness that cheapens the appearance of the shoes. A splash of colour that will give a pleasing effect should be introduced by arranging an artistic vase, a bowl of flowers, a bunch of heather or a simple drape of velvet, on which fancy buckles can be displayed to advantage.

The following notes will be found helpful in dressing shoe windows—in fact, in window-dressing generally—

For brogue shoes introduce purple or white heather. For brown walking shoes introduce colour by way of daffodils. For dress shoes introduce colour by way of petunia or drape of emerald.

## Arrangement of Colours.

It naturally follows that to be up to date the display man must be in touch with prevailing fashion and colours. At the moment havana, a lightish brown, prevails. This is a somewhat difficult colour to harmonize with any others, but deep sky blue or cerise will be found useful.

Monotony of colour should be avoided. This should not be done by using equal proportions of two colours. Better results are obtained by blending moderate proportions of a second colour, and it is advisable not to scatter the second or harmonizing colour. A mistake frequently made is to place dozens of bunches of coloured flowers here, there, and everywhere. Take, for instance, the colour just mentioned, havana; in the case of a show of handbags, if a bunch of forget-me-nots is placed on every bag the result is laboured and inartistic. In such a display it is far better to collect all the bunches of flowers and place them together in one vase; the result is that the "splash" of colour is instrumental in giving tone and a pleasing appearance to the whole. It cannot be too strongly impressed on the mind of the display man that the scattering of colour is not productive of the best results. The policy to adopt is the grouping of harmonizing colours in a formation of artistic designs, each being complete in itself and related to the other colours in the window only by being part of the whole.

CHAPTER X

# ORIGINALITY

ORIGINAL ideas in window displays attract attention, and in some cases increase sales. On the other hand, some methods may be original and attractive and yet not be sales producing. There is a vast difference between being "funny" and being "original." The funny idea, such as a wax figure dressed up as a sweep, with clean hands and face, placed in the midst of dainty white blouses, announcing a "Clean-sweep Sale," may be original, but it is a too "laboured" effort, and not one that would appeal to the average person as being as clever as it was absurd.

In order to make additional sales by original methods of window-dressing, it is necessary to study the influence that an idea will have upon the class of people it is desired to attract. Some display men have been fairly successful with window displays that have shown the goods under extraordinary conditions such as—Houses made up of tinned goods, books, etc.; railway engines made up of towels, handkerchiefs, etc. Light-houses, windmills and castles, made up of articles offered for sale have also been erected. The

FIG. 16

method is to make a rough framework of wood in the desired shape, and then to cover it completely with the particular articles for sale. It is to be very much doubted, however, whether the time taken to build up such schemes is spent to the best advantage, and unless the goods have

some direct relationship to the scheme the display will fail to create the greatest possible demands.

### Suggestion for a Cycle Window.

The following scheme may be adopted in dressing a cycle window.

Transform the window into a country scene, representing the popular village inn, or "Half-Way House," with a sign-post with hands pointing to town and country; lean two or three bicycles against the post, and introduce a camera, fishing tackle, picnic baskets, etc. (*See* Fig. 16.)

In large windows a similar treatment may be given to motors, but the atmosphere must always bear a direct relationship to the goods for sale. In a display of washing materials, the writer introduced a wash-tub, soap, etc.; and three "pucks" representing butcher, baker and candle-stick maker (*See* Fig. 1). The tickets used in this display are shown in Fig. 8. Note the wording, and the connection between the "stunt" and the goods.

### Suggestion for a Chemist's Window.

The small chemists' shops have often made remarkable displays that give inspiration to others. The following is a scheme which could well be carried out. Place a chair, with a blanket over it, near a "fire;" on a small table have a bottle of cough mixture, and display tickets worded to this effect—"Sitting over a fire will not cure a cold, but a bottle of ———'s cough mixture *will*."

It is the simple, "clean cut" idea that attracts and produces sales, and the illustrations in this section will help the reader to understand that originality counts in all trade window displays, and that the size of the window is no excuse for the ordinary "everyday" type of display. Make your windows "talk," and those who are attracted will talk, too. The advertising value of up-to-date window-dressing cannot be measured by the square yard.

## CHAPTER XI

## THE USE OF WAX FIGURES

The posing of wax figures affords many opportunities for original methods of display; for instance, the writer once introduced the idea of a wax figure dressed as a maid, fixed in kneeling position, lacing the corsets worn by a standing figure. This particular display was made in connection with a corset demonstration, and much attention and interest was attracted by the unusual pose of the figures.

### Natural Poses Necessary.

Modern wax figures simplify the work of original displays, and can with care be posed in many attitudes that give expression to the thought behind the goods. Unfortunately, wax figures are often used in far too careless a manner, and many shop windows to-day present the appearance of a cheap form of waxwork show. This weakness could be overcome by the judicious use of figures posed in graceful and natural positions, or grouped together in such attitudes as are lifelike. Enterprise on the part of the equipment houses to-day results in perfectly made features in models representing all ages. These figures are no longer to be regarded as for the "ready to wear" shops only, for they can successfully be employed to give atmosphere and originality to the show window displays of all trades.

### Garden Tools.

A window display of garden tools, lawn mowers, etc., would, by the addition of a wax figure of a man dressed as a gardener, give a touch of life to what would otherwise be an ordinary and somewhat "dead" display.

### The Furniture Displays.

A display of furniture could with equal success include wax figures to demonstrate the ease and comfort of the lounge chair, and a display of office equipment would look more business-like by the use of a well posed man's figure.

### The Small Man.

In short, there is no limit to the uses to which up-to-date wax figures may be put. The expense of wax figures may be too great for the small man, bearing in mind the limited number of his window displays in which a figure could be used to advantage. By continually using the same figure it soon becomes stale and less attractive, but these disadvantages can be overcome by the hire of a model on various occasions for a week or ten days. This privilege the small man is able to enjoy, and so can present in his displays entirely different figures from time to time.

The windows of a very small shop may be too small to allow for a wax figure, but since no window is too small to contain an original display, the shop with tiny windows should not relinquish the idea of being attractive.

SECTION 20

# Shop Interior Displays

By G. L. Timmins

CHAPTER I

## THE IMPORTANCE OF LOCATION

The business that is out to do a "catch trade" and make chance customers is able to work along lines very different from those of the business that is out to build up a "regular customer" trade. The business situated in such towns as those with a large "floating" population is able to make many successes by methods that would prove a failure to the business that must of necessity draw its trade from the permanent population of the district.

### Changing Departmental Location.

The shop catering for the floating population often finds it an advantage to change continually the location of each department. To-day a sale of boots may be taking place in the bargain basement; to-morrow the boot department (reduced to half the space) is removed to the rear of the ground floor; and so, in turn, each department gets changed round. Big interior displays are made during the "boom" of that particular line in which stocks are quickly turned over. Such methods are suitable only to the "go as you please" shops and stores in which the customer is able to look upon the shop as a place wherein to spend a pleasant hour. On the other hand, nothing more pleases the client of the progressive shop which is catering for a regular trade, than always to find well organized stocks attractively displayed in a department he or she knows just where to find.

It will be seen, therefore, that it is not good policy to continually change the location when catering for a regular trade. This does not necessarily mean that the methods of such departments need become stale—far from it; the same class of goods should not be continually shown in the same manner.

### Goods from Other Departments.

A department dressing ought to include goods from other sections. Do not adopt the selfish attitude, but co-operate in making the department attractive. For instance, a display of gloves may be improved by a drape of material, and the one helps to sell the other. A tea service may appeal more strongly if shown on a dainty cloth. The purchase of a pair of shoes might lead to the purchase of smart sports hose if the interior displays of one section work in conjunction with another.

Realizing the possibilities of interior displays, a well-known City warehouse which for forty years had its ground floor space occupied by offices and a counting house, has now cleared the whole of the ground floor and installed some forty glass show cases in which are tastefully displayed articles from as many departments. Hundreds who had traded with the house for many years were surprised that there were so many departments carrying such comprehensive stocks. The result is sales producing, and the trading figures of the firm show considerable increase.

CHAPTER II

## SALES-PRODUCING INTERIOR DISPLAYS

In the previous Section many of the problems of the "outer show" have been dealt with. Window display is an exceedingly important matter to the shopkeeper, but it should not be so concentrated upon that the matter of interior display is given little or no special attention. When building up a retail business it is very important indeed that the interior does not prove disappointing to those who have been sufficiently attracted by the window display to enter the shop. We have heard such remarks as: "Wasn't it disappointing inside?" "What a dark shop!" "Well, there wasn't much to see in there," made by people coming out of shops which had quite attractive window displays. This is not good business. It is quite impossible to obtain the best results from display if the outside show pleases while the inside displeases.

### Common Mistakes.

Many traders make the mistake of sacrificing too much floor space for window space; others show all the stock in the windows, devoting their attention to outward appearances. First impressions are all very well in their way, but in the matter of display first impressions, as conveyed

by the windows, are not lasting impressions unless they are backed up by a sufficiently attractive display inside the shop. The show windows are the invitation to enter the shop, and it is inside where expectations should be realized. The shop interior should have a reputation for backing up the window displays in the same way as an advertisement has its truthfulness tested by the quality of the goods which it advertises.

FIG. 1

The matters of value and service at the counter are treated elsewhere in this work, and as this Section is devoted to the consideration of methods of interior display, we must presume that the value is right, the goods are satisfactory, and the service is all that can be desired—without these characteristics of successful shopkeeping, the most attractive interior display will count for nothing.

## Wasted Space.

Too many shopkeepers waste interior space, and this is particularly unfortunate in small shops in the case of which it is so important to make the interior look as big as possible. In this connection mirrors are extremely useful; but, in addition, the method of dressing-out can influence the appearance to a very great extent, and be instrumental in creating sales. Goods attractively displayed on the counters and in show windows facilitate salesmanship. Counter space is often wasted by having fixtures on the end of the counter; rolls of wrapping paper, also, are often to be found on the counters.

The various classes of business demand different treatment in the matter of display, so that very few hard-and-fast rules of general application can be laid down here. The illustrations, however, will no doubt be helpful in suggesting methods applicable to the particular trade of the reader. The accompanying sketch (Fig. 1), for instance, is suggestive of many decorative schemes for the interior. It shows a display made on top of the fixtures, and an "island" counter round the construction column of the building. Glass cases and low fixtures, in which the goods can be seen make selling easy.

## Ledge Decorations.

Modern trading calls for quick service, and fixtures of a reasonable height to enable the salesman to reach the goods without having to climb up steps or ladders, are a necessity in the up-to-date shop. (Several types of suitable fixtures are illustrated in this work.) Fixtures six or seven feet in height are applicable to most businesses, and the type of such fittings affords many opportunities for making most attractive displays. The width of a small shop is considerably increased by dressing the tops of the fixtures and dispensing with the display of goods on lines and brackets over the counters.

Divided counter cases, glass-covered, are very

suitable for many classes of shops. A rough sketch of a useful type of case is shown in Fig. 2.

Seed merchants, for example, often add considerably to their sales by using such cases. All

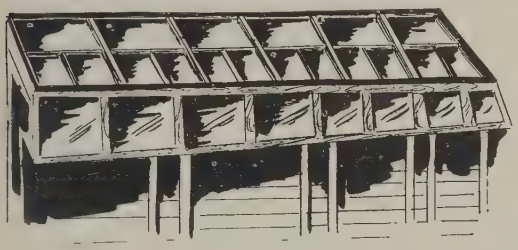


Fig. 2

small ware may be displayed to great advantage, and such goods as biscuits are particularly suited for display in this type of fitting, as they may be kept perfectly clean while being "on show." In such a display each division of the case should have a neat card attached, on which the particular kind of article and the price are noted.

## Column Treatment.

Constructional columns appear in very many shop windows and interiors, and it is necessary to utilize these to the best advantage. Many

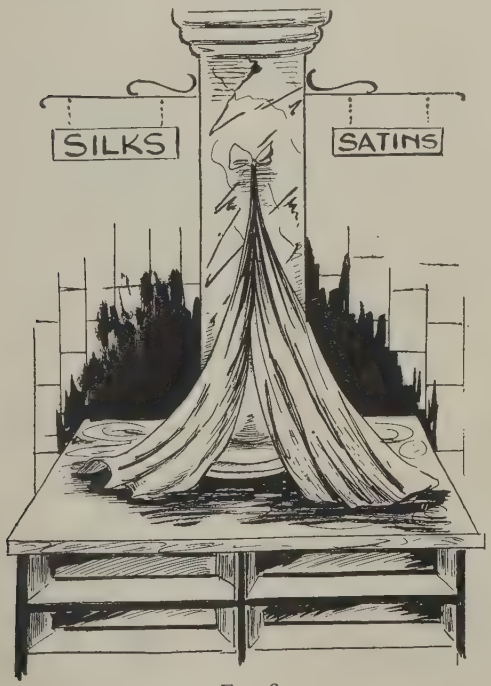



Fig. 3

difficulties will be met with, but these may be overcome by methods similar to those shown in the accompanying sketches.

Fig. 3 shows a suggested arrangement for utilizing a constructional column. A drape of material minimizes very considerably the apparent awkwardness and unsightliness of such a column.

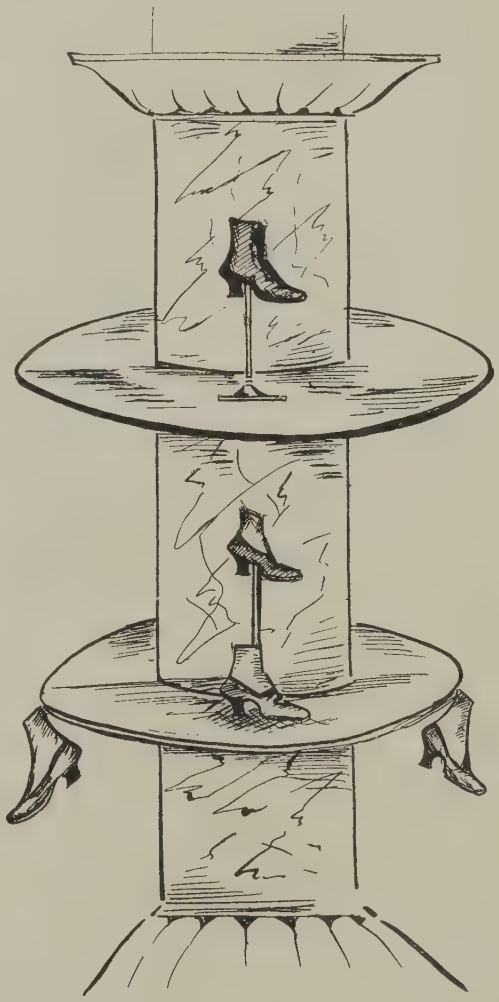


Fig. 4

The disadvantages of constructional columns may also be overcome by the use of shelving, on which tasteful displays of boots, shoes, books, confectionery or other goods may be made. Such a display is shown in the accompanying sketch (Fig. 4).

## Wall Space.

Many wall spaces and backs of windows, etc., are often quite wasted, and unnecessarily so; they may, in most cases, be utilized to good advantage. The furnishing trades in particular are able to make very good use of such space for displays of window furnishing, casement curtains, etc. Other traders, however, may with a little thought and planning make equally successful use of such space, and so add to the attractiveness of the interior and assist sales.

## Furniture Displays.

Two suggestions for the furniture dealer are given below. Fig. 5 is a rough sketch showing how good use may be made of low-built spaces for interior furnishing displays, and how what

Fig. 5

would otherwise be waste wall space may be devoted to giving suggestions for window casements, etc.

The sketch shown in Fig. 6 is suggestive of many decorative schemes applicable alike to the shop window and to the interior. It will be noted that the casement window on the left is particularly suitable for an interior wall display. The sketches seen through the window not only give a pleasing effect but convey the idea of space; and it should be the aim of the design, especially in shallow places, to convey this idea. The display shown in the sketch also demonstrates the use of the particular material displayed, both as a chair covering and as a curtain.

## Panel Backgrounds.

Panel backgrounds intended to be permanent may be made of wood; they may also consist of movable frames which may be covered with materials such as, in a drapery store, cretonnes or plain casement materials. An effective use of panel background is shown in Fig. 7. The upper part of the window back is carried out in plaster relief work or paper. The suggested window valance or pelmet is carried out in three-ply wood or beaver board. This departure from the old

Fig. 6

style of dressing gives a pleasing effect and forms an excellent method of concealing the lighting arrangements. The suggestion is applicable equally to window displays as to interior displays. Care should be used in choosing a very narrow valance for low-built windows. Grey or biscuit colour is the most satisfactory for the purpose, these being colours that will harmonize with most

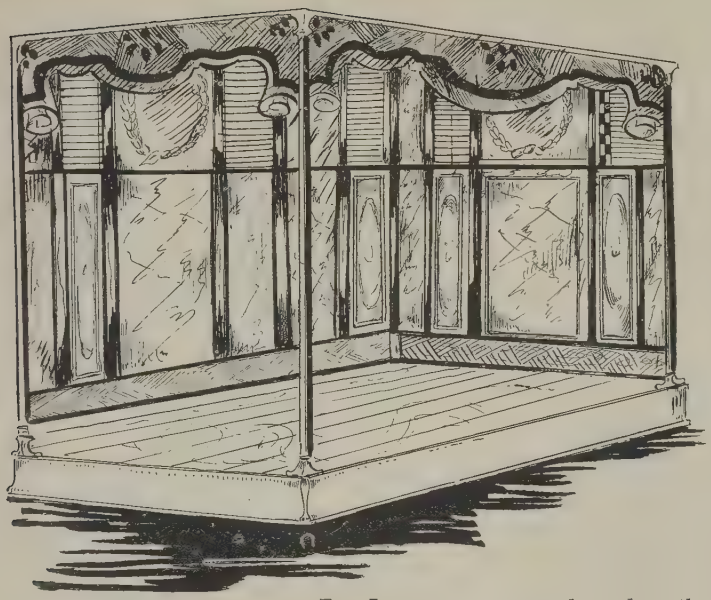


FIG. 7

displays—and they are less liable to fade than are many other colours.

Mirrors at the back of windows or show cases are rarely satisfactory, often reflecting that which it is not intended should be seen and detracting attention from that which should be seen.

## Impromptu Stands.

Very few display men make the best use of things that are just a little out of the ordinary—out of the ordinary, that is, from the point of view of the purpose to which they are to be applied. In other words, sufficient is not made of the ordinary things of life in putting them to uses in the making of displays. The ordinary display man is inclined to stick too closely to recognized forms, stands and methods. Many impromptu stands may be used to give desired effects and to give less laboured appearance than those given by the ordinary shop stands.

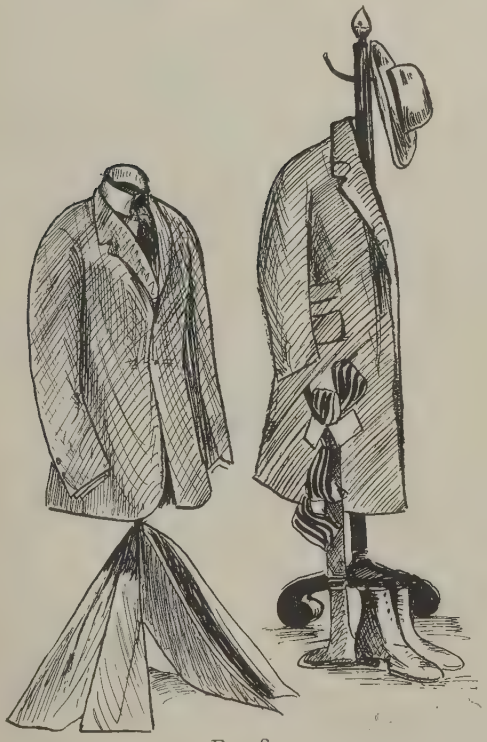


FIG. 8

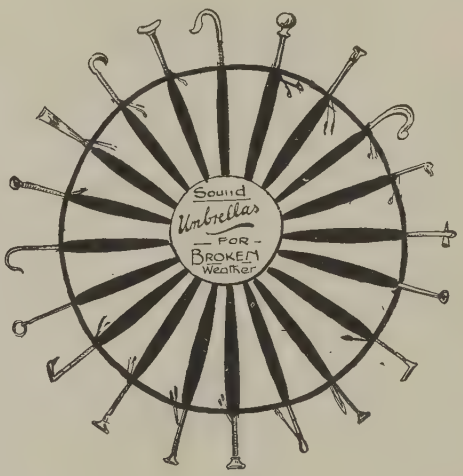



FIG. 9

The sketch shown in Fig. 8 has been drawn with the idea of demonstrating the possibilities of the use of impromptu stands. It illustrates an effective method of using a hall stand for showing off overcoats and hats to considerable advantage.

Many shoppers are apt to become dubious over the fit of a garment which is displayed in a manner that suggests much padding. In showing articles of men's and women's wear, therefore, it is often advisable to get away from the ordinary methods and make use of a chair, table, suit case, or other suitable articles of everyday use, and so show the goods in their more usual surroundings. This display of garments in a less conventional manner adds "atmosphere" and is a valuable aid in creating increased sales. A very successful display of ladies' wear may be made by introducing a dressing table, wardrobe, or other furniture.

FIG. 10

FIG. 11

Wooden hoops of various sizes make excellent impromptu window and interior stands, and there is no limit to the uses to which they may be put. Fig. 9 gives a suggested arrangement for a display of umbrellas, and Fig. 10 shows an effective method of displaying hosiery.

Figs. 11 and 12 further illustrate the use to which hoops may be put, in the first case to show piece goods, and in the second case to show sewing cotton.

Decorative unit hoops make excellent stands on which to make an artistic arrangement of artificial flowers, as shown in Fig. 13.

## Wholesale Houses.

A few years ago every form of window-dressing was regarded as belonging exclusively to the retail shop. To-day, however, both wholesale and manufacturing concerns are entering into the display world with zest. In many cases the windows of the leading warehouses have been reconstructed in order to allow greater scope; other manufacturers, who for years have had their warehouse windows painted over, now have on show goods in which they specialize. At the trade exhibitions at one time one saw only "boxed in" stands, hiding their wares as much as possible, but the exhibitors now have attractive stands and tasteful displays.

FIG. 12

FIG. 13

The art of display is fast gaining prominence in every commercial undertaking, and the various shop-fitting firms, by their introduction of specialities in the way of fixtures, fittings, etc., have done much to encourage this increased interest.

## Special Events.

National and local events should be encouraged by the trader, for they afford opportunities for demonstrating the shop's readiness to meet the needs of the moment.

Merchandizing efforts are productive of direct sales, but at times it is advisable to present the goods in a different atmosphere, and the seasons, spring, summer, autumn and winter, can with advantage often be linked up with the goods by the use of artificial flowers, foliage, etc.

## SECTION 21

# Salesmanship

By Albert E. Bull

### CHAPTER I

### INTRODUCTORY

Salesmanship is the touchstone of all business.

Nowadays we are taught to look upon commerce in the broad light of mutual service for mutual benefit, and to judge commercial success, not in terms of personal fortunes, but in terms of public benefit.

In achieving the best results in this way, the salesman has an important function. He makes exchange easier; he opens new markets; he overcomes obstacles to trade; he brings necessities and luxuries to larger multitudes.

Primitive notions present pictures of the single family growing or hunting its own food, living wastefully and miserably with many acres to each hungry mouth. Modern efficiency provides for the thousand wants and appetities of crowded myriads in small areas. Exchange of goods and labour has made the latter condition possible, and in the rough-and-ready system which has developed, and which, after a fashion, works fairly well, the salesman holds a useful place.

In this work, social theories are out of place. For practical purposes, we take methods as we find them, and justify the commercial machine by the simple defence, "after all, it works."

To the writer of these lines it is a marvellous thing that forty millions of people should exist on a small island in greater personal comfort for the poorest of them than nobles had a few centuries ago, and he defends any economic method that makes this possible.

In this result the salesman has his undoubted part. Theory makers (whose theories, in practice, might lead to universal starvation for all we know) admire the producer, tolerate the distributor but sneer at the salesman.

"This selfish fellow," they say, "is a parasite who battens on extorted and scrimped profits. He is the modern edition of the old criminal who shaved parings from gold and silver coins. He adds no value to the goods he sells, but scrapes his profit from them."

Business men have a right to protest against such criticisms, hurled at them chiefly by disgruntled dreamers and gaining acceptance by the thoughtless.

Salesmanship is as honourable and necessary a duty as production or distribution. It is part of a wonderful whole, being of the special value that it is the part by which the whole is kept efficient.

"I mean to go into commerce," said a young man. "I want to be an all-round business man. What should I learn first?"

"Learn salesmanship," was the reply. "It is the central office of commerce."

#### Dangers.

Salesmanship certainly has its dangers. Very often it limits a man's outlook and keeps him in a rather narrow place, chaining him down to the small problems of the day, and making him miss the bold vista of the forest in the sight of separate trees. But commerce depends upon an infinite number of small acts being done well, and the net effect is good, even when some "mute inglorious Milton" becomes absorbed in selling neck-ties, or a possible Cromwell becomes a commercial traveller.

But salesmanship is big enough for bold visions. "If I can open markets a thousand miles away I can open factories at home," is salesmanship in its creative and conquering spirit.

The man who finds out where goods can be sold is the pioneer of the man who plans how they shall be produced.

#### Branches of Salesmanship.

Salesmanship has many branches. For convenience, we divide the subject under four headings—

Retail: counter and shop selling and canvassing;
Wholesale, or commercial travelling;
Advertising; and
Mail Order business.

In this section the first of these will be dealt with. The other subjects are treated in separate sections.

### CHAPTER II

### THE COUNTER MANNER

Doctors make much of "The good bedside manner." They regard its possession as most valuable. The medical man who is brusque and surly, or who is timid and nervy, loses very much. Entering a patient's bedroom like a dam-bursting reservoir swooping down on a peaceful village, or

like a pickpocket avoiding arrest, is not helpful to a general practitioner.

Hence the phrase : " Good bedside manner."

A good counter manner is just as important to a salesman. It is the beginning of all success, so we will deal with it first. It is of greater necessity than a knowledge of stocks and prices : it comes before all technical and trade considerations.

In those things that belong to manners, it is rarely sufficient to be imitative. A man cannot help being himself, and in revealing himself as he is. He can change himself or control himself, both of which are inward acts and must be effected inside the mind.

## Necessary Qualities.

For the cultivation of a good counter manner, tact, courtesy, and hopefulness are necessary. It would be the most absurd kind of mistake to suppose that any of these qualities can be learned by merely adjusting what one *does*. The only real way of becoming courteous, tactful, and optimistic in appearance is to gain these virtues as inward facts of temperament.

The counter man who is polite, merely and simply because he wants to get your business, gives himself away at every turn. His politeness is not real ; it hasn't a genuine ring, and is either servile or play acting.

Occasionally, such a man is fortunate enough to be a good actor, but more often he is not, and the results are painful. Sham politeness may be all very well as a make-shift, but it is bound to break down as a permanent method.

This is not a book on ethics, nor does it suggest that a man's whole character can be changed, merely to adapt him to a commercial position, but very often the causes that make a man rude and surly, though these are certainly faults of character, are comparatively easily remedied.

Tact and politeness go together so much that they can here be considered at the same time. If the counter-man wants to be polite and tactful at his work, he had better begin by cultivating these graces at his play.

He should make friends out of business, and then he will feel friendly in business. He should get to know the people he can like and can feel drawn to and whom he does not mind taking pains to please, and almost certainly he will find it easier to be pleasant to everyone else.

Tact has been described as " the power of putting oneself in the other person's place." The man without friends can't do that very well ; and the man with friends can do it best when his friends are pleasant people.

Hopefulness is infectious, and cheerful comradeship inspires hope. Pessimists and grumblers may come one's way, and they may be hard to avoid ; but it is well to remember that every growl and grumble and grizzle a man hears knocks something off his earning power as a salesman, inasmuch as it awakes an echo inside himself.

The good counter manner must be a real expression of personality or it will not last.

## Subjects of Study.

The salesman has two chief subjects of study : people and things ; the first is always the more important of the two.

A business man may intend to adopt salesmanship as his career, or he may take it up as a temporary experience to introduce him later to other parts of business. He may see it as his life task, or as an occasional and intermittent duty.

It does not matter much to what extent he adopts the occupation ; his duty, while he does so, is to succeed as a salesman. Some business occupations may seem to permit of perfunctory and careless study, but salesmanship is scarcely worth undertaking at all unless it is given undivided and whole-hearted interest.

Its chief demand upon its student is that he shall make himself strong on the human side, and this duty does not belong to only eight hours ; it covers the whole waking part of the twenty-four.

The " good counter manner " is easily learned by the man who knows the give-and-take rules of comradeship, who gets on with people because he likes people. It is a hard lesson to the shy or to the scornful, to those who are afraid of their fellow men or who regard them with lofty contempt.

## Sincerity.

A sincere salesman is at a great advantage. He need not keep putting a mask on his face. He can be himself all the time without effort. The best tact is often the outspoken and forthright candour that addresses the duke or the dustman in precisely the same way. A toadying and wheedling accent rarely pleases any one, least of all the person who has money to spend.

In the long run, the salesman who holds his head high and preserves his sense of equality and manhood, who speaks over the counter to a millionaire as he would speak over the table to a casual stranger, gains rather than loses. Independent and self-respecting sincerity may occasionally annoy some haughty and conceited folk, but most people respect the language that rings true and the manner that is the real expression of the man's own mind.

## Importance of the Salesman.

Among all occupations, retail shop-keeping and salesmanship can hold their own, if judged by the men and women who follow them. A score of shop-keepers picked at random would be quite as progressive, quite as genial, and quite as helpful to humanity as a score of University professors, civil servants, or even popular novelists.

It is possible, however, that the conditions under which a retailer works do not sufficiently remind him that he is a unit in a great system of mutual service, and the net effect of the method in which he is a competitor is general efficiency in production and distribution. He is not so constantly reminded as people are in some other taken a very insignificant place in achieving this end; but this is not so, for he is the man who is in touch with the ultimate buyer, the consumer, of the majority of products, and possibly more than anyone else has set in motion the mechanism by means of which greater comforts are secured and better service is done.

*By permission* *The B.T.H. Co., Ltd.*

A Typical Example of Concealed Lighting of Shop Windows
(X-Ray Reflectors and Mazda Lamps)

occupations of the benefit of his efforts towards the general good, and may be inclined to take the rather casual and superficial view that, in competitive business, "if Jones does more, Smith does less."

But in trade, as we know it, this is not a fair summary of the case. Competition through the generations has brought into being the marvellous balance and adjustment of power and industry that enables the great populations to be fed and clothed. The retail tradesman may seem to have

The salesman has to work with two sets of people. These are the buyers, and his fellow workers. This last group, for our purposes here, includes the men over him, the men under him, and those from whom he obtains his supplies.

## The Junior.

At the beginning of his experience, he is probably an employee occupying perhaps the humblest position in the shop. It is important that he should be able to work well with all those above

him. The best way in which he can do this is by constantly trying to put himself in the other man's place.

Some time ago, a junior in a department of a large concern made a serious mistake in some task that was allotted to him. It was a mistake of the nature that brought the whole department into reproach, and the young man responsible was not surprised when he heard that "the chief" wished to see him in his private office.

Expecting dismissal, at least, he made his way to the stately office he had never entered before, and was somewhat surprised to be received with quite a warm and genial handshake, and an offer of a comfortable chair.

"I thought we ought to have a chat, my young friend," said the great man. "I want you to put yourself in my position. Here am I responsible to my fellow directors for the smooth working of this department with eighty people working under me. I am one of those ordinary people who are likely to make mistakes and I dare say I make them sometimes, and my good name suffers. But what worries me is this, that if the whole eighty of my helpers make mistakes as well, it becomes a terrible collection of blunders for one poor being to have to shoulder. I wish you would think of this. Our department is only allowed a reasonable margin for blunders, and I want all that margin myself."

The young man learned his lesson better from this kind and genial reproof than he might have done from a violent and scornful denunciation.

One of the most difficult things for a junior to learn is that the man above him must bear the brunt of his mistakes. This works right through all trade. The manager whose assistants do their work badly, suffers because of their inefficiency. It is a black mark against him when one of his helpers makes a mistake. Equally the department manager who accepts careless work, and permits any kind of service, does so at a cost to the proprietors of the business.

It is often declared, by those who do not give thought to the subject, that the man above them takes all the credit when they do good work, and gives them the blame when they don't. This, of course, is often true, but it is precisely because everyone in trade is responsible for the acts of those who work under them that faults are blamed and good work taken for granted.

It is when the one-time assistant steps into responsibility and must account for other people's work, that he discovers that the junior really calls the tune and it is the senior who pays the piper.

The shopkeeper who employs twenty assistants has really twenty men whose united efficiency may make him prosperous, but whose united carelessness can ruin him.

What wonder he takes good work as his due? It is what he pays for. And what wonder he lashes out against the blunder that, repeated often enough, will drain away his reserves and possibly throw him upon the labour market, the most unfitted of all: the man who has failed in his own venture!

## Mutual Regard.

Working well with those around one is an essential part of good salesmanship, whether one be principal or employee. An ability here to understand the attitude of one's fellows need not destroy personal ambition, or reconcile one to any kind of treatment, but it makes united action easier and helps to form that atmosphere that is conducive to smooth working.

It was a recognized plan among some traders years ago to keep their assistants "on the jump" by pitting them against each other. Probably the idea still holds good, and, within limits, competition of one kind or another is good. But there were men who worked this plan with almost sinister intention, sowing seeds of disagreement and jealousy where they could.

As an avowed policy, this theory is now regarded as old-fashioned, wasteful, and injurious. Men are now boldly advocating friendly mutual regard as a business proposition, and many firms that boast of "the happy family" idea among their workers are quite among the successful houses.

The point is dwelt on here because it is a vital one in salesmanship. The man at the counter who is working in an atmosphere of suspicion, distrust, and unhappiness cannot sell well.

Unconsciously, he affects the customer with those nerve waves of dissatisfaction, and business suffers.

## The Retailer's Problem.

Almost any buyer can discover, when he enters a shop, what are the real relations of the employer and employed. He can read it as if their quarrels, disputes, distrust, and smouldering anger were written on the walls, and equally he is conscious, from the very atmosphere of the place, if there is good fellowship and kindly feeling.

"When I was a commercial traveller," said a business man, "I used to find it was often very hard work to get to see my customers; but when I became a retail shopkeeper, I found it was very much harder to get my customers to come and see me."

In this sentence he gathered up the main difference between the two trades. He had been a successful traveller and particularly so in getting the entry to large and substantial buyers. In retail business, he had been equally successful in getting large numbers of good customers to trade with him.

It is comparatively easy to go out and call on people. As long as one has any kind of pretext, there is no reason why he should not present

himself at any buying office in the kingdom. It is easy, too, to open a shop in a moderately busy thoroughfare and draw a certain amount of chance custom.

The problem in each case, however, increases in proportion to the amount of success aimed at. But where one or two marked abilities may suffice in the first case, the requirements for success in retail salesmanship are so numerous that the man who is not thoroughly all round in his capacity is sadly handicapped.

## CHAPTER III

## THE SHOP

Some time ago, a wealthy firm reasoned it out that the public was quite prepared to travel a short distance in order to do its principle shopping. In a great northern city, some way off the beaten track of heavy business, and yet on a main arterial road, is the great block of shops they had erected, now lying derelict and rack-rented.

The theory was that, for the convenience of spacious show-rooms and wide ranges of counters, it was worth sacrificing the heavy passing public. There would be a substantial saving in rent.

The attempt was a failure. People might be willing to journey in from the suburbs, or even from surrounding towns and villages, but go 400 yards out on a broad tramway road they would not.

### Position of Shop.

This is one of the mysteries of the retail business. The cramped, awkward, ill-planned, inconvenient shop, with the steady stream passing its door, stands the better chance of doing well than the much more suitable premises, in a district probably quite as familiar and well known, just a little off the line of the buying public.

In a town in the West of England, there are two thoroughfares running between the two main streets. The first of these is chiefly occupied by solicitors, accountants, and other professional men. There are, however, a few shops, all of which seem to be remarkably unfortunate. Almost parallel is the other connecting thoroughfare—an ideal shopping street where to secure a long lease is to obtain a guarantee of prosperity.

In this case it is a problem why one street should be good for shops and the other bad, but in the majority of instances the reason can be discovered easily enough. Custom and habit have something to do with it, but as often as not there is a cause that, though not at first apparent, is real enough.

There are streets where the sun never shines, where Arctic winds play havoc whatever the season; streets that are inconvenient somehow to cross to, not being in a line of customary short cuts.

There are streets, too, that are ruined for shopping purposes by massive and dreary architecture at the corner, looking dismal and uninviting from their entrance. They may be in just as good a position as those that are busy, but the heavy piles of masonry spoil them.

### How Shopping Streets are Spoilt.

And here, in passing, comment may be made upon the way that shopping streets can be spoilt. Banks are great sinners in this respect, and insurance companies follow them closely. They love the very centre of the city, the picked corner, the busiest spot. Plate-glass gives place to Italian pillars and carved granite. Because the West and Northern Bank buys out Higgs, the draper, the South and Eastern Bank must dispossess the grocer next door. Along comes "The Wide Range Deposit Insurance Company," and the hosier's and tobacconist's across the road must move elsewhere. The one-time busy shopping centre becomes a study of Perpendicular styles, and the buyers shiver as they hurry past.

London rang, some years ago, with the protests of the traders in a great shopping street, because a huge hotel had changed the architectural note.

They feared that great projecting pillars of stone, with distant views between them of shop doors, would kill the trade that centuries had built, and they were right.

Though the eye of passers by may weary of architecture, it will never weary of pleasing shop fronts.

### Accessibility.

Salesmanship must be made easy for the buyer. Being accessible is one of the great lessons a good retailer learns. The chief points of accessibility are known to everyone, and probably it is unnecessary to devote much space to them. A quick survey, however, should be made.

### Selecting Premises.

"When we contemplate opening branches," said a director of a great multiple shop business, "we count the passers by.

"We have the chief towns of England mapped and are constantly working upon the results, so as to bring them up to date. We do not work on such a plan as: 'Taunton is a good town, we will open there next.' We have fifty towns like Taunton on our 'future' list. In each one of them the traffic has been carefully analysed and we know in average how many people pass certain points every day.

"In consequence, we have a list in each town of the dozen or twenty or fifty shops it would be desirable to take, and another department is ready with estimates of rent values, all filed, to step in and drive a bargain.

"Of course, the mere fact of numbers of passers by is not the only information we get; but it is the important part and everything else hinges upon it."

This work is not intended to present the multiple shop idea as the best in trade. The illustration is used merely because it endorses what all traders believe, that the retailer's best chance lies in being accessible to the largest number of people.

After all, shop salesmanship has many points in common with commercial travelling. The success of the traveller is wrapt up with his success in getting to his customers. The retailer cannot do this in a number of varied acts, so he tries to do it in one single act. That is, he places himself where the largest number of likely customers will probably be.

## The Main Street.

Quite obviously, the first advice that would seem to apply to the would-be retailer is: "Get a good stand in a main street."

But equally obviously, many of the readers of this work will reply: "Precisely. That is what I aim at. But the problem is, how to do it? Front street shops command high rents far beyond my present means. They involve heavy costs in fitting and equipment, and, what is even more important, the present tenants of all first-class shopping premises are great clingers; they flourish and will not lightly vacate their shops; they have successors."

The man who plans to open a retail business, plans to do so within the near future; it may be years before one of the desirable shops of the town becomes vacant. He is surely not to postpone his intention for a good part of his lifetime because he cannot get the shop he desires?

Some people would do so.

The policy is not recommended here, but it must be recognized.

"Ten years I waited for my shop," said a successful retailer. "I had my name down in twelve cities and large towns, and in each case I marked out the one or two streets in which I was prepared to open."

This trader preferred to remain in a situation and mark time, rather than make what he regarded as an initial blunder. He was a man with nearly £3,000 capital and he had learned his business in a high-class front street shop.

The case is merely noted, but it should be added that the business he had in mind would have been rather difficult to work in other than a good centre. His theory of trade, however, was that a retailer can easier lose money than make it, and that the profits of a retail business advance not in arithmetical ratio but in geometrical, as the value of the stand improves.

Thus, according to his theory (and he illustrated from mathematics), "If B is twice as good a position as A, and C three times as good, you would not merely make twice and three times as much profit in the latter shops for the same effort, but more likely, four times for B and nine times for C, or even eight times for B and twenty-seven times for C."

## An Old Method.

In the old days, the retailer's idea of advance was often to open where he could and look out for a shop to which he could move when the chance came. This method more particularly applied to the provincial market town than to the city with suburbs.

## Multiple Shop Competition.

The theory still holds good. But the retailer must now face the fact of the intense competition of the multiple shop firms.

On the plan indicated above, these companies are able to estimate, almost to a fraction, the value of any premises, and in fighting against each other they raise the rents out of the reach of poor men.

In a certain good-sized town a few years ago, where the leases of twenty shops fell in simultaneously, the landlord notified the tenants that they might retain their premises by paying quadruple the rent they had been paying, although he could get much more from multiple firms. As only a year or two before, similar property was changing hands at the lower price, the sudden rise showed how swiftly this outside competition had arisen.

## Successful Side Street Shops.

The beginner may not get his front street shop. But he can still keep this idea of accessibility in his mind.

A traveller told a story a little while ago about two shops. They were both catering for the working-class grocery trade. One was in the main street; the other down a branch thoroughfare.

The main street shop did little trade, while the other was most fortunate.

"I found out the reason," said the traveller. "Most of the working-class people in that district lived in three or four great blocks of artizan's dwellings, and to get out to the main throughfare they had to pass up the side street, right past the very shop where the thriving business was done."

It was so very obvious. What woman, busy with her housework and probably untidy, would wish to go into the glare of publicity if she could shop near by?

## The Entrance.

Some shops are hard to enter. This is not always an architectural difficulty, such as an awkward step up or down, or the door being at the windy corner, where one gets blown past it.

Often the entrance is bad because the spirit of salesmanship is wrong.

There is, in London, a long-fronted shallow shop with the counter facing the door. In the middle of the counter, at a raised desk sits the proprietor, a worthy and excellent man, but with a face rather too like a benevolent judge. The door is always open !

But as one approaches, or looks in ; that judicial suggestion halts one. There are good and pleasant things in the windows, well worth buying. But it is well worth considering. When one enters a shop, two old inherited instincts come into play ; one is : " I am a guest in another man's house " ; and the other : " There is bargaining to be done ; I must not be worsted in a bargain."

What really happens, when the owner of a shop makes himself thus benevolently prominent to an approaching buyer, is that these two instincts get into conflict. The process of sub-conscious reasoning differs in different people, but the net effect is bad for business.

*By permission* *Messrs. James Keith & Blackman Co., Ltd.*

A Drapery Showroom
Lighted by " Keith Light "

alas ! few of us are bold enough to enter and buy.

Probably the proprietor of that shop regards the arrangement as ideal, and wonders how a business can possibly succeed where the owner hides himself away from likely buyers. There are doubtless old customers, to whom the benevolent face and the semi-throne in the centre of the counter are attractions.

But where the idea is wrong is that the great majority of people prefer to enter upon those transactions in which money may ultimately change hands, in an unobtrusive way.

The point involved is largely psychological, but

Here are some of the decisions arrived at in such circumstances. They may not be deliberately thought out, but something like these conclusions are formed—

" Oh dear, I must go somewhere else, I hardly like to ask if they keep the cheaper sort in there."

" Smiles at me as if he was my vicar and I a parishioner, and I may not buy after all. Not in there, thank you."

" If they watch me coming in, they will arrest me going out."

" I suppose there are half-a-dozen more in there who stare like that, and the moment I start

buying, all conversation will cease and they will gather round."

These seem absurd reasons why people should not enter a shop, but they are sufficient reasons. The basis of them is not entirely timidity, it is more frequently that re-awakened sense that the guest is under an obligation to a host, and that on another man's premises one is at a disadvantage.

The whole effort of retail salesmanship through many generations has been to break down this conventional notion. It is largely for this reason that efforts have been made to give the public touch to a shop wherever it is possible to do it. The pattern of the market rather than that of the consulting room has been adopted, and the wise salesman has taken pains to let the buyer know that the door stands open for him to come and go.

In this connection, it may be useful to note the clear meaning of the orthodox shop entrance. The general idea is a bevel or slant of the front window, with the actual shop door retired a few feet. The effect of this architectural arrangement is that, gazing at the window, and still preserving the sense of being *outside* the shop, one can actually be standing *inside* the actual line of the premises.

Many modern shops carry this idea still farther, and it is possible to walk about between external rows of shop fronting or show cases, and purposely irregular windows. Indeed, it is sometimes difficult in some of these labyrinthic mazes, to know if one is inside the shop or still in the street.

The slanting bevel means: "This shop is public. Enter." Probably the more devastating development means the same, though it is not entirely free from the suspicion of being a somewhat superior kind of mouse trap, from which there is no escape but by paying ransom and making a purchase.

The retailer has largely broken down the sense of obligation of guest to host, and the bevelled front is his token of the fact to the public. Strangely enough, the only man in trade who still insists upon being "Mine Host" on his business premises is the one man whose premises the law declares to be a *public* house.

## Making Approach Easy.

Good salesmanship demands that the salesman shall make approach easy. It is in the application of this rule that the best opportunities arise. There are shops in which really remarkable ability is displayed in allowing the customer to retain all his liberty, and yet having attention ready for him the moment he requires it.

This is really a great problem of salesmanship. A buyer does not like to be neglected, neither does he like to be "set upon."

Here are two comments—

"I was in Blanks, Ltd., for twenty minutes to-day. As no one seemed to care if I wanted to buy or not, I got tired and came away."

"Never again. I got into Vastores, Ltd., to buy some collars, and when I had got them I tried to get out. People sprang at me, cornered me, badgered me. Innocent-looking glass cases concealed salesmen in ambush. Eager shop-walkers harried me down blind alleys where loquacious sellers lay in wait. Even the lift-man took me up instead of down."

The retail salesman has the task of adjusting himself to these two conditions of mind. It is not merely an arrangement of the complete business policy, it is a separate individual problem.

Whatever method is adopted, there will always be exceptional people who are not pleased, and who complain of being neglected or of being pestered.

## Freedom.

It is more than probable, however, that the best way to err is on the side of giving freedom, and of risking the occasional loss of custom through seeming inattention. The majority of the great stores owe much of their success to their understanding of the public love of liberty, even when wandering about on private premises. They have, perhaps, more successfully than most shopkeepers, carried the "market place" tradition into their places of business.

As a practical act, every retail salesman who gets to London or some of the other large business centres, should make a point of wandering about the well-known stores, and noting the methods adopted toward possible buyers. Retail employers in London and similar places would find that it would well repay them to give their assistants time off during shopping hours, for this purpose. This suggestion is made because, of all people, it is the London shop assistant who is least likely to know anything of London during shopping hours; his week or fortnight of holiday being usually spent far away.

## Approachability in Arrangement of Shop.

Some shops are easy to enter, but make the heart sink when they are entered. The writer has in mind one or two where the feeling suggested by the inside of the entrance is just as if one had stepped on to the platform of the Albert Hall.

It is bad for business for the spot just inside the door to be the prominent centre of the shop. Usually, this is caused by the space being too wide and too clear, and commanding too full a view of the whole interior.

The effect of something like a spacious entrance hall may be imposing, but it is nerve shattering to many timid people. A customer does not appreciate the fact that all the attendants and

customers in every possible direction can get a good view of that space.

The timid buyer, who, stepping inside the shop, drops his umbrella with a loud clatter and is at once in full view of twenty searching pairs of eyes, is distressed. There are, however, many shops and skilfully managed shops too, where he could enter with all this turbulent *éclat* and be almost unnoticed.

The entrance may be a place where the full glory and capacity of the shop are visible, but it should be the same kind of command that, in a theatre, can be obtained from a side box, rather than from the stage.

Some of the great modern stores are very successfully laid out in this way. The customer is not dazzled with a bewildering sense of everything being across a great open space, but he has the pleasing sense that there are corridors and passages and clearly printed directions to help him to find his way.

In a certain sense, though the shop is full, he has almost the privacy of a walk through a town street or a country lane. He is not, in any place, like the belle of the ball, the cynosure of all eyes.

The arrangement of the premises may make a wide open space necessary. There are shops in which this difficulty can scarcely be overcome. But when this is the case, it should be made easy for the entrance to lead immediately to the side.

## CHAPTER IV

## MANNERISMS

MAKING it easy for the customer is not limited to the position of the shop and the internal arrangements. Approachability is a personal matter also.

"I can't bear the younger Mr. Wheelwain to serve me," said a customer of a certain shopkeeper. "He has such a ringing voice and he puts so much sarcasm into it when he denounces cheap shoddy goods. I feel that everyone stares at me and writes me down as an advocate of cheap and shoddy."

This particular salesman, one of the proprietors of a large business, had to be exiled to the office on this very account. It was a pity, because he was a clever salesman and had excellent manners for his work in many ways, but his platform voice was a thing of wonder, and when he was selling, everyone stopped to listen. It was boasted of him that he could run the whole gamut of two octaves in a single exclamation of scorn, and be heard across the road when he discussed comparative values.

People like orators, but they don't want to meet them when they go buying beeswax or paraffin or enquiring the prices of gramophone records. The salesman of this sort may have the same nerve-racking effect as the conjuror who points at a timid little book-keeper and declares: "That gentleman in the third row with the wing-collar. Yes. You, sir. Come up on the platform and examine the cards."

This is an extreme case of the unapproachable salesman—he is, rather, the salesman people hide from and shun. This kind of man can scatter a business.

### Other Types.

There are other types.

A draper was engaging a new salesman. In every way the interview seemed to be satisfactory, but one doubt troubled the employer.

He suddenly left the young man, went over to a mirror, carefully examined himself and returned.

"I didn't think my collar was crumpled or had become unfastened," he said, "and I am relieved to find that it is not."

After which cryptic remark he went on—

"You won't mind, will you? But should a customer come in here with a yesterday's collar on, I feel sure he will be hurt in his feelings if you examine it quite so intently as you examined mine."

The young man had been a salesman for a good while and no one had pointed out this little trick to him. It is impossible to say how many people had felt offended during his service by the cold stare that he was in the habit of bestowing upon the neckwear of his *vis-à-vis*.

Somewhat similar to this habit is the custom that some folk have of looking too intently into the eyes of those they meet. This is not so unfortunate a habit when the look is natural and unstrained, but apparently the absurd idea still holds good in some places that "an honest man can meet the eye," with the consequence that a fixed gaze is studiously affected.

That there is "honesty" in a straight glance is ridiculous, as, most obviously, were this so, the knack would at once be cultivated by the rogue. The person who is quite unable to meet a fellow's eye is often a quite admirable character in every way, including honesty.

It is the studied pose here that irritates and offends. The bold glance that is not natural is unsettling and devastating, and should be avoided.

### Getting Rid of Faults.

There are many little tricks of manner that could be enumerated, some of them the outcome of restlessness or timidity. It is not suggested that a salesman should make too much of the fact that he possesses such disabilities. It may be worth an effort to shake off some specially troublesome habit, but where the effort fails it is well to think no more of the fact. After all, we are ourselves and the world must take us as such, faults and all thrown in.

Whatever happens, a salesman must not let the knowledge that he has some kink in his manner unnerve him, or make him feel himself at a discount. He should know himself—he should, if possible, correct himself, but when all this is said and done, "a man's a man for a' that."

## The Speech.

Tricks of speech may be as trying as tricks of manner.

A salesman is usually a specialist in his subjects, and like other specialists, he hears a lot of nonsense talked by people who think they know and don't.

The specialist, in such circumstances, finds it easy to speak out and set people right. In some cases he may do so. In the case of a salesman it is unwise.

Let a layman give a king's physician a discourse on medicine, or instruct a double-winged flying man on aeroplanes, or open forth on authorship to a popular novelist, or explain bridge building to a civil engineer, and he may expect a retort of crushing and voluminous weight.

Yet this man behind the counter hears folk upon the other side, ignorant and uninformed, do deeds as daring. They discuss satin—with him—he who knows satin from A to Z.

It is hard for the specialist to stand still. It is hard for him to state the truth about it all with quietness. But it is good counter manners that he should do so.

There are many occasions in retail shop serving when errors call for correction. A salesman should not silently accept a statement that tells against his goods or prices, which he knows to be incorrect. It is almost his duty to state the real facts in such circumstances.

But in the manner of doing it the salesman may easily frustrate the object he should have in view.

"What did you tell Mr. Smith when he complained that we had overcharged him?"

"I told him he was a liar, sir."

Frank! Yet it might be put differently!

## The Right Time to Speak.

In all discussions of the value of giving as much freedom as possible to the customer, it is impossible to make a general rule that meets every case. The salesman must use his perception and be influenced by appearances. It is usually easy to see when the right time comes to speak to a possible buyer.

The class of goods stocked can also guide us. A customer rarely enters a cycle shop or an oil shop with other than a fairly clear notion of what is wanted, and delay in attending to him is really neglect.

But in some departments, the more a customer is left to his own devices the better.

A good example of this is the book shop. Book buyers are notoriously the last people in the world to rely upon the advice of others, and probably no line of business opens out a greater number of chances of the advice tendered being hopelessly wrong.

To offer a jockey a racing novel when he is really seeking the latest theological work by the Bishop of Birmingham, or to thrust upon the attention of a University professor some profound volume on economics when he is coyly hunting for a detective story, is not the way to help business. The notion that a person's taste in reading can be discovered by appearance is a wild idea. The book buyer is attracted by the very covers of books and has a hard struggle with himself not to buy them all. All the while he stands before the shelves he is fighting a tempter that bids him "buy." If he stays there long enough he probably will buy. The proferred advice saves him. The spell is broken and he goes away with his money still in his pocket.

# CHAPTER V

# SHOP WINDOW SALESMANSHIP

The shop window is the sample case.

Every traveller knows that the worst policy "on the road" is to carry false samples; that is, specimens which do not fairly represent in quality and appearance the goods that they are supposed to represent.

The window should be a faithful presentation of the shop. If it is not so, the shop trade will suffer.

Supposing a trader fills his shop window with bargains, making an imposing array of cheapness and value, and when the customer has entered the shop he finds a quite different class of goods for sale, that customer will never shake off a sense of being deceived.

The untruthfulness of the window may not be anything that can be seized hold of, but a window can be untruthful although every article priced in it is obtainable in the shop.

The deception, if it is intended, is subtle, and the customer is doubly aggrieved, because though he has been deceived by misrepresentation he has no actual case to prove it.

Thus, it would be possible to dress a hosiery window in such a way that, reasoning from what is seen to what is out of sight, a buyer might calculate: "I shall be able to get my kind of collars in here at about ninepence."

There are no collars in the window. He enters. Yes, they keep his kind: "A shilling each."

Now that window is a deception. In a trade in which there are different grades and prices, it indicates a certain grade, and where the goods are not displayed, a different grade is offered once the customer has stepped in.

## Special Lines.

This disagreement between the window and the shop is quite a different thing from the offer of cheap lines or special bargains.

Such an offer is at all times permissible, and constitutes one of the recognized methods of obtaining new business.

The traveller carries special lines—a shopkeeper has an equal right to offer them : in fact, the axiom of many traders is : "If you buy bargains, sell bargains." Many retailers regard themselves as the representatives of their clients on the subject of cheap lots and special value. They hold it is their duty to look out for special purchases in order to give their customers the advantage, and in order, also, to attract new buyers to the shop.

Very naturally, too, the window is the right place to display these special samples. A trader is like an advocate, he does not omit his strongest arguments in an appeal to the jury.

But it is possible to display the special lines in such a way as will faithfully represent the trade of the firm and will not cause the feeling of having been deceived.

This fair statement, by means of the window, is really very necessary if a permanent and increasing trade is to be established. It may be a hard task to get someone to enter a shop for the first time ; but that is a very faulty kind of method which, having accomplished the hard task, prepares a reception within that will effectually prevent further visits.

There is growing up in some retail trading concerns a custom of putting aside a part of the premises for cheap lines, and running a kind of perpetual clearance sale. "Bargain Basements" and "Bargain Counters" are becoming familiar phrases.

The shop window should represent all departments, at some time or other, and it is reasonable that the "Bargain Corner" should be represented.

*Photo lent by* *Messrs. Fredk. Sage & Co., Ltd.*

A Shop Front of Pleasing Design

Carried out in Bronze Metal and Marble

But this is a vastly different thing from making the shop window a perpetual bargain display with no hint that it is not a fair picture of the whole trade.

## Window-Dressing and Display.

Window-dressing is rapidly becoming a specialized art, and many firms find that, when they have discovered a clever man at this class of work, they can get better value from his services by keeping him at it than by letting him scatter his efforts.

Every salesman should seize the opportunity to do this kind of work, not merely as a task apart, but in relation with the work of over-the-counter selling.

Since the beginning of shop-keeping a war of controversy has waged around the window.

"Show everything you want to sell. Crowd your windows," says one.

"Concentrate!" cries another. "Let the window frame a single article, or at most a very small selection."

"Wire blinds," demurely puts in a third.

At present, "wire blinds" seem hopelessly defeated. There was a time when some of the traders in good provincial towns, who cultivated "the carriage trade," were quite satisfied that this was the best way of gaining and keeping custom. But through the country there has been a marked decrease in this appeal.

Much, of course, depends upon the class of trade that is being catered for. One does not expect to find in Bond Street the shop front that would be suitable for Rye Lane, Peckham—but tendencies are clearly marked. The tendency of the moment is to the crowded window, with every available inch well filled and all prices clearly marked.

It appears that the marshalling of all the forces in a window display presents many difficulties. There are so many excellent and successful efforts made in this work that it is easy for us to think that a window dresses itself, and not to recognize the amount of study that such work involves; and, what is more, the touch of "genius" it requires.

## The Confusing Window.

The huddled or confused window, without balance or harmony, in which articles are thrown together without relation, is a shattering and scattering window. It gives the eye no resting place. It will not permit concentration upon any one line.

Often this sort of window is a result of some mistaken idea of doing fair justice to all the stock, but more often it comes from a lack of that sense which, in an artist, shows itself in the treatment of sky-line.

An artist believes in centre, and he knows that variety emphasizes centre more than perfectly symmetrical balance will do. He is making a picture, not a parallelogram. But all the same, he will see to it that his point of view commands an aspect in which the very irregularities form the completest kind of whole.

## The Well-Balanced Window.

The well-balanced window arrests the eye and holds attention; but "well balanced," in this connection, does not mean the pot of marmalade 12 in. from the right pillar being matched by the pot of jam 12 in. from the left.

Copies of famous or even ordinarily attractive landscapes lend themselves to a very interesting experiment by the man who is about to dress a shop window. Take such a picture and give it a false centre by covering up one side or the other.

At once a marked change is noticeable. Sometimes such a thing may be done without great loss of beauty and attractiveness, but rarely can it be done without a loss of restfulness.

A window-dresser may scarcely allow himself to be an artist in the wider sense. He may not suggest forest slopes on one side and placid streams on the other, but he can avoid too slavish a notion of rigid balance.

## Gaining Attention.

There are two consequences desired in dressing a window. One is that it shall gain attention, and the other that it shall hold attention.

To make the passer stop is a harder task than, having done so, to draw the mind on from one article to another.

When a shop window attracts attention at all, it is customary for the eye to take in more than the object that first arrested it.

## Window Contrivances.

Hence the many artifices and contrivances that are constantly springing into use—comical figures, tapping figures, mechanical contrivances, cartoons cut from newspapers, and similar endeavours to arrest attention.

Where these fail is that too often they succeed in doing what the *bona-fide* shop window does not do. They stand out as separate and detached items of interest, making a change over of attention to other things in the window an act of difficulty.

The more conservative type of tradesman is averse from these contrivances. His reason is probably one of dignity and a reluctance to display anything that militates against the serious commercial nature of his appeal.

But, quite apart from this objection, he is well warranted by the fact that a window show which does not attract the mind to the actual business carried on in the shop is valueless.

The method, however, is not entirely to be condemned. Spreaking broadly, the window-dresser's first business is to get people to look at the window. His attitude here is excusable when

he reasons : "My window may be criticized or it may be condemned. It may be disapproved from the angle of etiquette or proprietory or custom. But it shall not be ignored."

### Boldness and Originality.

Window-dressing is one of those sections of the work of salesmanship where boldness and originality have their best chances.

A newspaper proprietor and journalist who was for a time a retail tradesman, and who made his first heavy money over the counter, often speaks of those days.

"I believe I am a bad buyer and I know I am a bad salesman," he says. "I am not sure that I am a very clever organizer of other people's work. But I can gather a crowd. People *did* notice my window. In fact, the police at times advised me to restrain my gifts, as they wished the thoroughfare passable. I had the idea in my mind that a shop window ought to be as interesting as the front page of my favourite newspaper, and as up to date, too."

It is a point for the salesman to consider, as to whether there may not be a great revolution in our ideas of window-dressing in the near future. The modern publicity spirit is only just beginning to show itself behind sheets of glass.

It is well for the retail salesman to watch and be prepared.

## CHAPTER VI

## STOCK

"Two things I like to see in my salesmen," said a retail draper. "One is self-respect. The best salesman I ever had possessed the presence of a duke. Deference from him was a compliment to any customer. I have known quite haughty folk modify their manner to him, and yet he never overawed people. He took himself seriously. It was the best kind of self-respect.

"The other thing I like to see is respect for my stock. The man who does not believe in his wares can rarely sell them."

### Respecting One's Stock.

The effect of possessorship or association is curious upon some minds. There are some people who regard any article as precious the moment they handle it. This is not fictitious or fanciful with them. The same man at home believes "my" garden, "my" house, "my" piano, the view from "my" window, are unique things, transmuted by the personal pronoun into an inestimable value.

Upon the other hand, there is a temperament that is unfortunate enough to view the things at hand as poor, no matter what they may be. This condition of mind baffles analysis, but it is an unhappy one in a salesman.

It is said that the children of the sweet-shop keeper always buy their sweets at another shop. "They are better than mother keeps."

A trace of this kind of self-depreciation often lingers in grown-up people. The salesman who once allows himself to be obsessed by this habit, increases his difficulties.

The remedy is to learn to respect one's stock.

A salesman whose department was "woollens" went, on his holidays, to visit some relatives in the North of England. They lived in a village near Bradford, and had some influence in a large woollen mill.

The suggestion was made that if the visitor cared to see over the mill, it could be arranged. So it came about that the man who had handled incalculable numbers of yards of cloth, saw, for the first time, how the cloth was made. From unwashed wool, as it had been sheared, he traced the series of processes right up to the finished bale ready for despatch.

It was a remarkable experience to him. He questioned much and paused over details. He begged permission to return for a second visit, and in the meantime spent some hours at the library getting fuller light on what he had seen.

When that man returned to the counter, he had added enormously to his powers as a salesman, for the things he was selling had a new interest to him. It had never occurred to him before that he was dealing in goods, the ultimate finish of which had resulted from a long series of discoveries and inventions as cram full of romance and interest as any book that came from a gifted author's pen.

His private library became enlarged, and he began to get some little local fame by his paper on "The Loom and Its History," read before debating and literary societies.

Buyers who came to his counter began to find him a very interesting salesman, who had something more attractive to talk about than the weather.

But that wasn't the only point. A piece of cloth, as he handled it, seemed visibly to improve in value before the customer's eyes. It was no longer a dead thing, with neither history nor poetry. Its virtues called for respect and appreciation.

Unconsciously, the customer was thus brought into that very condition of mind in which buying is not simply easy, but in which buying becomes a longing. Sales improved.

The man who respects his stock is far more likely to get his customers to respect and desire to buy it than the one to whom stock is a burden and a barrier, an emblem of slavish hours and unpleasing toil.

In the case cited, the salesman obtained the right kind of earnestness in selling because of his increased knowledge of his goods.

Nearly always there is this result from study of one's subject.

The salesman who brings his mind to bear upon his subject in some places outside ordinary commercial use, becomes a better salesman.

Science, history, romance, and imagination have built up the stock of the modern trader. The salesman who ignores these things is missing some of his best selling points.

## Care of Stock.

Closely allied with appreciation of and respect for the goods one handles is the subject of care of stock.

Two things contribute chiefly to this. One is suitability of storing places, and the other is the personal attitude of the salesmen and stock keepers.

There are shops where "shop soiled" must be a frequent description, simply because they are so planned and so fitted that goods must deteriorate in them, no matter how carefully they are handled.

Shop-fitting has been dealt with in Section 5; and where this work is entrusted to an experienced firm, the tradesman is greatly assisted in his endeavour to keep his goods in proper condition.

But often there is not capital available for doing all that one would like to do in this respect. Fittings have to be contrivances, and the best has to be made of material at hand.

Small, cramped premises, too, involve the use of every conceivable spot for storing goods, and very easily articles may overflow and become trampled on, simply because there is not room.

One fact becomes obvious: that "the corner in behind somewhere" is the easiest place of loss. As to the precise manner in which this corner shall be treated, this is a problem that can be solved in different ways. Probably the wisest is to make some slight re-arrangement of fittings, even at the cost of a carpentering job, to get that corner rather more prominent. Another is to box it in.

## New Stock.

An excellent rule for keeping goods fresh is that no new stock shall be placed upon a shelf or in a receptacle that has not been brushed or dusted out, and that for this operation the remaining portion of the old stock shall be removed and replaced after the new has been stored away.

This means that the new stock is always placed behind the old.

When goods are rarely sold down to the last packet before the shelves are replenished, it is obvious that unless there is some simple system of placing the older articles before the new, a certain number of goods may remain unsold for months or years.

A trader whose business is very largely in packet goods adopted a simple method of testing the length of time that stock remained on his shelves.

His plan was to use coloured chalks. Yellow was for January, red for February, blue for March, and so on. One small stroke meant the first week, two strokes the second, right through the month.

As packages were brought from his warehouse and transferred to the shelves of the shop, the mark for the week in which they were received was made upon them in a manner that would be noticeable when looked for, but not otherwise.

At the end of three months he began to be aware of some important and useful information as to the length of time some goods were taking to pass through his shop. When he had exhausted not only the primary colours, red, yellow, and blue, but the secondary, green, orange, and purple, he was even more fully informed and found that before he could get back to the use of his primary colours again, he would need to make a second mark upon some packages which still remained unsold, though they had been received into stock six months before.

It is advisable for all people handling stock to adopt some system like this.

"The top penny is the profit" is well known to all of us, but what may be overlooked is, that the last package is also the profit, and it is quite as easy to lose the profit in one place as in another.

In those trades in which it is the custom to have season sales, there is not the same liability to accumulate stock as in the places where the demand is uninfluenced by seasons and changes of fashion. The draper, for instance, has an advantage in this respect over the grocer.

## "Dead" Stock.

Where trade is continuous and one week's business may be similar to another's, and goods sell with equal ease or difficulty all the year round, the tendency is for the profit to go on the shelves.

This is a particular peril in these days when, by means of advertising, a new article is forced on the market. Sometimes the publicity effort is suddenly stopped, through want of sufficient response, and the retailer is left with a stock. Such a stock can easily become the deadest of all stock.

Such a method as is indicated above would bring to light a case like this as soon as the goods began to get a few weeks beyond their latest proper time for sale, and a bold display on the counter or in some prominent place would prevent an ultimate loss.

## Advertised Goods.

The advertised brand for which advertisements have definitely stopped is often a case for enquiry. It may be the policy of the firm to conduct its publicity in "spasms"; that is, to make a bold

overture lasting a month or two, then to allow an interval to pass, and later to repeat the attack.

Where the goods are not perishable, it may be a mistaken policy to act abruptly in the way of making a clearance before enquiries are made. A letter to the advertising firm would probably bring some useful information. But even here caution should be observed, for it can hardly be expected that a firm that has burnt its fingers by an expensive and unsuccessful campaign will make too clear a declaration that there will be no more advertising.

Where such advertised goods are perishable, or likely to deteriorate by being kept in stock a long while, it is very advisable to act promptly. The firm, of course, should be given a chance to take back what will not be sold; but, failing such an arrangement, the first loss is the best, and the goods should be boldly marked down and cleared out.

A lady who ran a most successful grocery business, declared, after twenty years' experience, that she had never lost a penny on deteriorated or unsold stock during all her years of trading.

In the most prominent part of her counter was a well-polished mahogany tray on which were displayed "the day's bargains." Sometimes the tray would be full, sometimes it would have but one or two articles on it.

These were the lines that had been in stock long enough for her requirements. In all cases they were marked down to the actual cost price within as close a fraction as she could calculate.

This marking down in a grocery business could not be a very substantial reduction, for margins of profit are often very narrow. But the tray was well advertised by its position, and even a penny on sixpence is held to be worth saving by the thrifty housewife.

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A Shop Equipped with "Eveready" Fittings

CHAPTER VII

## PROBLEMS OF SERVING

THERE are shops where, no matter what is asked for, the assistant, with a swift movement, seems able to place the article on the counter while he is saying "and the next article, please."

### Handiness of Stock.

These shops and their assistants are really among the marvels of the age. A dozen circular sweeps of the arm, scarcely a movement of the feet, and a complicated order is made up. Paper and string seem to come there by magic.

In contrast with these is the shop where the naming of a required package seems to set a tremendous problem to the staff. The assistant's face becomes the face of a student—an industrious and affable student, without doubt. The order takes upon itself the glory of a test paper in a matriculation exam.

"A pound of granulated?" "Certainly, madame." (Fumbling amid shelves.) "William, have we any granulated? Ah, over there. Thank you, William, I'll come around." (Further fumbling.) "William, this is not granulated. This is white castor." (Explanations.) "Ah, certainly. In behind the butter. I see now. Stupid of me." (More fumblings.) "William! This is soda. Don't you remember, we couldn't find the soda yesterday? Here is a whole stack of it. Sorry, madame, we seem to be out of granulated. We have moist and castor. Ah, what's that? A bag of granulated behind the golden syrup? So there is."

This kind of salesman is greatly handicapped. His work is multiplied and the day is largely made up of wasted effort.

Henry Ford, in explaining the secret of the cheapness of the Ford motor car, lays great emphasis upon the important fact of economical movement. He bent his efforts toward perfecting an arrangement of such a character that every worker should find the piece of work that was to engage his skill, not only immediately before him, but at just such a height and angle that not a single muscle of his body would be unduly taxed or feel an unneeded strain.

The theory that he worked upon was that in all mechanical employment, by far the most effort was used up in movements which were entirely unneeded, and which tended to make the needed operation perfunctory and careless.

It may be a wide guess, but it is quite likely that the idea may have come from seeing the two different ways in which a retailer can handle his stock.

On the whole, it must be admitted that the majority of experienced retailers have little to learn in this respect. To the young man about to enter this kind of business, it is here suggested that the success of a retail concern can nearly always be gauged by this test: If the shop is full of wasteful movements, much tramping about and "searching" for goods, that shop is not climbing into prosperity. If, on the other hand, the assistant appears to have most things within reach, or at all events pretty handy, that shop is out for increasing trade, and will get it.

### A Practical Suggestion.

As a practical suggestion, it is advised that where several assistants are serving behind the same counter, there is saving in the allowance of good room for passing between the counter and the shelves. Cutting down this space by a few inches means many waits, much contortion of body, and inconvenience.

In the arrangement of a shop or of a department with a view to quick and easy sale, a man with a very methodical mind may make the mistake of neglecting convenience in an effort toward order.

It is an advantage that each salesman shall have as many commodities near to him as possible, especially those which are in constant demand.

Take a grocery and provision store as an illustration. It is convenient and sensible that such provisions as cheese, bacon, butter, and eggs shall be kept at a different counter, and presumably at a different side of the shop from the more general groceries. But where the shop is long and many assistants are employed, it is not good in practice to have but one receptacle for each kind of commodity. Certain articles in constant demand can be broken up into lots so as to avoid, as far as possible, unnecessary passing from one place to another.

Then, again, the convenience of the customer should be considered in the orderly arrangement of stock. Still keeping to the grocery and provision trade, we will take an example.

A customer desires two articles. A pound of bacon and a pound of sugar. It is a busy day and a long queue of customers waits at each counter.

At last, after patience is worn and frayed, the bacon is secured.

"Next article, please?"

"A pound of sugar."

"The other counter, madame."

Another long wait! Another long queue must be served first.

Worse still. There may be a queue at the cash desk, and a dread of the suspicious glances of the bacon server convinces the timid buyer that she should pay for the bacon before she proceeds to buy the sugar.

Thus, a weary struggle through four queues to buy two packages.

Obviously, splendid as the arrangement may be and orderly as the system, that customer will

be strongly inclined to go to the shop where the same man serves bacon and sugar and takes the money.

## Obviating Delay.

The division of a business into departments is not usually inconvenient to buyers. But in those trades, such as shops supplying foodstuffs, in which there are rush hours and in which customers may have to wait a little time for attention, the possibility of causing a buyer to wait twice or three times for a queue to be served over a single purchase should be obviated wherever possible.

The difficulty can scarcely be met in such a case as that given above by a few grocery articles of constant demand being kept at the provisions counter; for the tendency then would be for all customers to go to that counter, and soon to expect to find all their needs satisfied there.

Some shop-keepers get over such a difficulty by giving the assistant a roving commission to serve from the both sides; others by the order being passed from one counter to the other and taking precedence of the waiting queue.

The point is, that a customer having waited her turn once, should not be expected to do so a second time; the assistant who serves her should be able in some way or other to provide that the whole order shall be proceeded with at once.

## Attending to Customers in Order.

One of the most serious mistakes a salesman can make is in neglecting to attend to customers in the order of their arrival.

The word "queue" has been used above, but the word is not strictly correct, for in most shops where a few people are waiting, they stand about in careless manner and with no choice of place. The public, going-a-shopping, is very good humoured, and most people wait their turn with good grace. Some are naturally pushful and become visible the moment they arrive, while others assume a more modest bearing.

We are all aware of the strident, egotistic shopper. No matter how many are waiting, or how occupied the salesman may be, the voice of the newcomer rings out: "Please—attend to me. I am in a hurry."

It is easy for the retiring and patient to be overlooked; but the sense of justice is strong in all of us, and though a lady may bear oversight with patience, she doesn't really like it, and some time or other she will transfer her custom to the shop where a fuller alertness to facts gives her a chance of justice.

## The Motor Bus Plan.

It was playfully suggested some time ago that retail shops liable to rush hours, should adopt the system of the Parisian motor buses. It is yet to be seen whether the plan might not work. Certainly it seems worth trying.

At the stopping-places of the Paris motor buses are boards with small pads of paper, each paper being numbered and the numbers going on through the pad. As intending passengers arrive, they tear off slips, and when the bus draws up, the passengers take their places according to the rights of priority. If fourteen passengers are waiting and there is only room for six, it is not the six who push hardest who get the places, but those who hold the slips with the earliest numbers.

We may see the time when purchasers entering a crowded shop are able to gain attention in the same way.

In the meantime, however, the eyes of the salesman must serve. It is a place where quick perception, good memory, and a sense of justice pay well.

## Giving Undivided Attention.

It is often advised that a salesman give undivided attention to a customer. The rule is good, but there are exceptions. Where a buyer is obviously undecided between two or more articles, it is often good policy to leave time for choice by attending to the next person.

The proprietor of a large store where there were frequently big rushes and customers had to wait their turn, made it a rule of his establishment that all customers should at least be spoken to, the moment they arrived at a counter.

In those establishments such as the drapery trade, where there is a shop-walker, the need for this does not arise. Often these are the very places where it does not do to be officious, and where the customer does better if left alone.

But where the shop-walker is non-existent and every available employee is serving, as, for instance, in most grocery and provision shops during busy hours, there is all the more need for alertness in this respect on the part of the man at the counter.

# CHAPTER VIII

# KNOWLEDGE THE SALESMAN SHOULD HAVE

In an important provincial town, somewhat off the beaten track of business, was a second-hand book-shop. This shop was a portion of a big house and through his long life the dealer in second-hand books had got into the way of letting his stock overflow, with the consequence that from attics to cellars the house was a great mass of books and bookshelves.

The store was noted through England, and probably most of the business was done by post.

But, huge as was the collection, not one second would the owner falter in answering the question

as to whether he had a certain volume. Whether it was Hope on *The Diseases of the Heart*, Mrs. Markham's *History of England*, or *Euripides with Morley's Introduction*, he could answer "Yes" or "No" to an enquiry; and if he had it, take his most direct course to it whether it was upstairs or down, putting his finger on the actual volume.

More than this, he could tell where each volume came from and the precise circumstance under which it came to him; it he had once possessed a volume or when he had sold it.

All the more remarkable was this because, as far as any outside eyes could tell, the books were not even classified: a request for books on, say, "Roman Law," might mean a journey to three different parts of the building.

## Knowledge of Stock.

This man was not a good business man, but he knew his stock. His memory for the outside of books was prodigious.

In view of what the human memory seems capable of holding, as instanced in cases similar to this, it is a reasonable thing that a salesman handling a few scores or even a few hundreds of articles should be able to remember needed points about them. The chief things are: "Where each article is stored," and "The prices of the goods."

A traveller some time ago declared that the average number of prices he needed to memorize in his trade was 3,000. He was a representative of a wholesale firm which supplied a very large number of articles in a great many varieties of quality. As some of his sales went into sixteenths of a penny, the task must have been heavy.

But his view was simple.

"It all comes in the day's work," he said. "One gets in the way of it. One of the first things I discovered was that fumbling over quotations meant losing orders, so I trained myself not to fumble."

It is very surprising how capable a man may

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A Well-fitted Shop Interior

sometimes be in salesmanship, and yet be remarkably ignorant of the goods he is handling. Some of the best travellers on the road (and the indoor salesman is apt to take notice of a traveller's selling methods) make no pretence of understanding all the uses of the goods they sell. It is actually a pose with some men to profess their lack of knowledge; but this kind of talk (usually from the lips of a man known to be a good salesman) may have a very injurious effect in that it puts a premium upon one kind of ignorance, and creates an idea that salesmanship is a mystic art in itself, having little or no relation to any profound knowledge of the things that one is selling.

There is a great deal of truth in the idea. A successful salesman of mackintoshes and waterproofing might be just as successful if he sold earthenware and china. He might change from a grocery firm to an ironmonger and be efficient in his new work from his first day.

But, apart from special genius for salesmanship, most people employed in selling goods are dependent upon a number of aids and helps, among which special knowledge of the goods themselves takes a very important place.

## The Trading Plan.

Knowledge of one's stock is wrapt up in the subject of policy. Everyone in trade has, or should have, a trading plan. For example, one man sets out to cater for a small but exceedingly particular clientele, while another caters for humanity in the average. One intends to do a "good family business," while another is eager for a cash market trade.

Every line of goods that is stocked has its relation to this policy. Whether he is proprietor or counter-man, the salesman should know why one brand is kept and why another is not; why one brand is sold when no name is specified, and why another brand is offered only when asked for.

Knowledge of stock means also the knowledge of the stock actually held. The salesman gets many opportunities of introducing lines, and when he is aware of how the stock actually stands, especially in season goods toward the close of a season, he will be able to use this power with greater economy and usefulness.

## Knowledge of Affairs.

It is a salesman's duty to be well informed. He need not be a newspaper or encyclopaedia, but there are certain common interests in which it is well to be one with one's fellows, and to be abreast of the times.

A certain salesman who knew his business well, who was careful and thorough, seemed to be missing the results he should obtain. It was noticed that some customers avoided him, seeking other assistants. His employer chanced to hear his reply to a customer's remark and understood.

"What do you think of the news from Russia?" asked the customer.

"I don't know it," was the reply. "I am so busy minding my own business that I don't get any time for minding other people's—Russia included."

"Don't you see?" said the employer, speaking to the assistant later, "that was a snub. That man clearly understood that you meant he was a busy-body."

"I don't think so," said the assistant. "You see, I am not really interested in the news one reads in the papers, and I feel I hardly like to put it that way, so I always explain that I am too busy."

"And you always answer a remark about news in those words?"

"Pretty nearly always. It's surprising what a lot of people refer to news I've never read."

That assistant had no intention whatever of being rude. Even when it was pointed out to him that his words sounded like a gratuitous insult, he could scarcely see that this was the case. He happened to be one of those rare people to whom occurrences outside his own circle were of no interest. If he read that paper, it would be for the local football match or the particulars of the tram accident he had witnessed. Politics was to him a name and foreign countries were off the map.

Quite apart from the unhappy formula with which he replied to those who passed a remark on strange topics, the man was an incomplete salesman, because he was an incomplete citizen.

## Interest in the World's Happenings.

There are circumstances happening every day of which no self-respecting man or woman should remain without knowledge or without interest. It is reasonable that occasionally one may hear some subject touched upon which may be held important by thousands of people, and of which one may know nothing, but this will not happen continually when a moderate interest is taken in the world's happenings.

There are subjects which some people abhor; even these, when continually referred to, should claim a little attention.

The new sub-editor of a leading popular journal went through the summer with flying colours, and was promoted to be chief sub as the autumn commenced. He had one favourite theme for dislike. He hated football; he regarded a football crowd as the most undesirable crowd in the world.

But the football feature of that journal was its chief winter feature. The sub-editor waded in and mastered the subject. Never did his dislike diminish, but before the season was far advanced

his articles on football achieved quite a name for him.

A salesman need scarcely be as conscientious as this. But if he is to sell to people, he must endeavour to identify himself with their interests.

## Intelligent Response.

Comparing himself with the outdoor salesman, the indoor man has a great advantage: he need not start the conversation. A commercial traveller knows well what this means. Very often his only prospect of doing business is by getting a possible customer interested in some theme of the day and later leading to business. Making small talk is tedious and wearing.

A man behind the counter, largely relieved of this burdensome task, can at all events be host enough to his guests to meet their overtures with some kind of interest. He certainly fails badly if the best he can do is to snub.

The salesman's "Yes" or "No," "Indeed!" or "Dear me!" is scarcely sufficient. There is such a thing as intelligent response.

## Human Nature.

We can't get the human nature out of business, and it is a good thing for us that we can't. The beginning of trading and exchange, of all those convenient methods by which the world's work is done, was the two people meeting to do a deal with each other.

The essence of the whole thing was that they were both living, sentient creatures, flesh and blood. As long as trade and industry last, the two living people will meet as humans together. There is no satisfaction in a deal with an automatic machine, and never will be.

It is a part of business, and an essential part of business, for the salesman to reveal himself as one with a hand and a heart and a mind that go out to his fellow-man—he knows what they are doing and thinking.

In a world where some newspapers sell by the million daily, the man who doesn't know how to be interested in the day's happenings is an anachronism and a back number. He may be all right in the office or the factory. He is in his wrong place at the counter.

## The Well-Read Salesman.

The salesman should read other things beside the news.

He need not be a university don or a professor of obscure wisdom, but he should be fairly well read.

The point is not that small talk and gossip will make a business. It is that a man must not cease to be himself when he starts being a salesman. If he has an interesting personality, so much the better. If he has not, then one of the studies of good salesmanship is to endeavour to gain one.

To this end, books have their value. The well-read man is nearly always the man folk like to meet. A well-filled mind is an attractive mind.

It is objected that the man in business can master his duties best by concentrating upon them, and the scattered interests are very injurious to the commercial mind.

This philosophy is doubtful anywhere, for the age of the narrow outlook is passing. But most of all is this a false method in salesmanship.

Wide general knowledge is intensely valuable at the counter, though it may not be quite so useful elsewhere.

## "Taking Sides."

A salesman is often in a difficulty about those matters on which opinions are divided and feeling runs high. Should a man declare his politics, for instance, or should he "agree with the customer"?

The answer is better settled by an appeal to the laws of hospitality than the usages of trade. The man in the shop is the host, the customer is his guest. A good custom decrees that the host shall be courteous to his guest. Courtesy does not play fast and loose with truth and convictions, but it presents both in a form that will not offend.

When people have opinions or convictions, it is folly to hide the fact. A saving sense of humour may prevent the fact being stated offensively. But the salesman who gives the impression that he would sell his country and his conscience for the sake of another threepenny ha'penny order is not a good salesman.

The employee, of course, can shield himself behind his position. The problem more usually comes to the trader who is his own master.

Taking commercial life in England as a whole, it is noteworthy that a great many men in trade take sides upon subjects of controversy and are known in public life as possessing strong views. It is doubtful if they suffer in the slightest degree through the fact being known. A, the draper, is none the less a successful draper because he is a well-known Conservative; and B, the ironmonger, has scarcely lost the sale of a coal scuttle because of his advocacy of Free Trade.

The trimmer is as undesirable in business as the man who makes his premises the platform of his own particular policy or "ism."

## Playing to Your Partner's Hand.

Everyone who plays whist knows the selfish partner, the man who is equally unhappy if his colleague or his opponent makes a trick. He wants to do all the scoring.

The same character is known in trade. There are salesmen who cannot see the business as a whole in the way that makes for the general good.

In no place is this kind of salesman so unsatisfactory as in the business divided into departments.

One of the underlying ideas of a department

store, or of a large retail shop divided into sections, is that one portion shall be an introduction to another; that, by a system of passing customers on, or by arousing their interest in some other goods, the advantage of a visit to one part of the building may be felt in others.

The salesman in such a business is not playing a lone hand. It is of first importance that his own special department take his chief attention, but beyond that he should regard himself as a general salesman of the firm.

This need not involve very much strain or loss of time. Frequently a word or two may suffice to secure custom for another part of the business.

Obviously, it presents itself as the best plan to introduce those departments that are nearest in the buildings. When the boot section is the next stand, and the fine art department is three floors up, it is easier to talk boots than pictures, and there is less likelihood of the customer getting lost on the way.

But there is no need to be bound rigidly by geography or propinquity. Human interest is quite as good a guide in such work. That one has been struck oneself with the fine array of children's books in the book department, and that the lady has two bonny children with her, should be quite sufficient reason for recommending a visit to that section, even if it means a journey by lift for the trio.

A salesman or saleswoman in such a business place, should be interested in the latest happenings in the building, much as one is interested in the latest happenings in a village. It is good subject matter to discuss.

"They have just extended the tea rooms upstairs, and are painting them such a curious vivid colour. It is really worth going up to see."

This, at tea-time, may secure custom.

### Making Each Department Pay.

The arrangement of a business which is divided into sections or departments is not confined to the mere arrangement that each part shall have a capable head and a certain amount of floor and window space.

It is usually a very good system indeed which provides that the buyer or manager of a department shall shoulder his full share of responsibility in making his section pay.

But, in carrying this method to an extreme, the shop with different sections becomes simply a collection of different business concerns under one roof.

The head of the firm is always the chief salesman, and in his special work of salesmanship is the provision for that constant balancing and re-adjusting that gives a sense of unbroken continuity and harmony between the parts.

"Ironmongery department, madame? I fancy it's downstairs somewhere," is not a good reply, even from the salesman of lace curtains.

This cannot be the fault of the heads of the firm. The ablest men may be badly let down at times by a careless employee.

But such incidents will be rare when the person responsible for the harmonious working of all departments with all others, is doing his part as it should be done.

## CHAPTER IX

## PERSONAL HINTS FOR SALESMEN

THE silent salesman is bad enough, but the over-eloquent server may be worse.

Fairness in conversation is not a mathematical allotment of minutes: it is rather more a sympathetic attitude of mind.

### Let the Other Man Talk.

There are conversers who will have a great deal to say and then allow a reasonable interval for a reply. But the reply is unnoticed when it comes and the converser continues his own remark precisely where he left it.

This is a little trick that annoys, and is quite as easily adopted at the counter as anywhere else.

Probably, if a man is not going to take any notice whatever of what is said by others, the best way is to drown their voices in the flow of ready words. It is more irritating to listen and to ignore than to overwhelm.

There are salesmen who are so filled with the sense of obligation to sell that they are apt to forget that time must be allowed to the other man to buy.

"No!" said a suburbanite, "I don't buy from Blanchards—not because I don't like Mr. Blanchard and his shop, but because he won't let me buy.

"I went in there the other day to buy a rake, and he tried so hard to sell me wire netting for a fowl run that I couldn't get in a word edgewise. I wanted a rake and I don't keep fowls. I did once by persistence obtain a hammer from him when I went to buy a hammer. But his mind was off hammers that day. He had got some Brilliantite for white-washing ceilings and fences, and he kept throwing it at me, so to speak."

Don't "shut up" your customer. Draw him out. The poor man may be suppressed at home, overwhelmed at business, and ignored in his club. To find that in you there is one intelligent listener, and in your shop one place where he can open his mouth, may make him a frequent visitor.

Apart from having your own interests and hobbies, it is good policy and good training to try to discover those of your customers. Make your counter an information bureau, if you like; but, better still, make it an information exchange.

### No Class Distinctions in Business.

The duchess and the washer-woman may stand side by side at your counter. You may know their relative positions, but do not let anyone else know that you know it.

It is quite possible that the duchess will be more annoyed than the washer-woman if you make too much of her rank. They are both customers, and both need courteous treatment, which is equally courteous to rich and poor.

### The Wrong Way of Putting It.

Tact is important.

"Not quite suitable to your age, madame. It might suit a young girl," is not a polite way of speaking.

"I should have the longer sleeves if I were you. They would cover that nasty scar."

And the poor customer had been fondly believing that the burn was no longer visible. It might be a kindness to let her know the truth, but there

*By permission* *Messrs. Saml. Haskins & Bros., Ltd.*

A Suitable Shop Front for a Jeweller

are tactful ways. Besides, very intimate points like this are better left to others.

"That suit is getting to look horribly shabby, sir. Can't we induce you to look at some of our new spring suitings?"

Barbers are privileged persons. But the world will one day send good trade to the man of shears who does not revile the hair for its thinness or scurfy nature.

There are things that may be said in low tones, but not shouted.

"We don't do business that way," as a quiet reproof, may be all right in some circumstances, but as a loud declamation it is hard on the customer who may have offended, unwittingly, an unwritten but important law of the shop.

"Very sorry, our terms are cash," is reasonable.

"No credit here, ma'am. There are plenty of people who wander round to snatch at your goods if you let them, and then clear out and never dream of paying." This is not reasonable or tactful.

SECTION 22

# The Legal Aspect of the Selling of Goods

By R. W. Holland, O.B.E., M.A., M.Sc., LL.D.

CHAPTER I

## OFFER AND ACCEPTANCE

The contract of sale is the common contract in life. Upon it, under our present social system, depends our very existence. Food, clothing, medicine, transport, all are subject of contract, and the first two usually are the subject of a contract of sale. A contract may be roughly defined as an agreement between parties to carry out a certain transaction under such conditions that if one fails in his undertaking, the other may appeal to the law to enforce the agreement or to compensate him for his loss, if any. Such agreements are arranged by means of an offer proceeding from one party and an acceptance of the offer by the other party.

In the usual sale by a trader to a customer over the counter no difficulty arises as to terms. If any question of difference appears and the matter goes into a court of law, evidence as to the words used by the parties who have dealt face to face will be admitted to settle the difference. If no evidence is available, all the implied conditions contained in a contract of sale will come up for consideration.

### Offer and Acceptance Contained in Correspondence.

In the case of contracts into which correspondence enters, the correspondence is the evidence of the contract and in it will be contained the offer and the acceptance. Mail order business, conducted as it is entirely by correspondence, illustrates the making of a contract by correspondence. It is necessary for the trader to realize what constitutes the offer, and what turns the offer into the contract, that is, at what stage in the correspondence the offer is really made and how the acceptance is conveyed. An advertisement appears in the columns of a newspaper or magazine in the following form—

BALLADS BY THACKERAY

All the verses scattered throughout the Author's various writings. Illustrations by Thackeray, Du Maurier, Collier, Furniss, etc., etc. Published 18s. net. Our Offer (as new) 6s. Post free on approval. *Mention offer* 344.

Kay's Booklovers Stores, 100 Downing Street, Exminster.

How far is the foregoing an offer of a book to anyone who will purchase it for 6s. ? It has been laid down by the Court that an offer may be made to the world at large, but it is turned into a contract only when accepted by a specific individual capable of carrying out the terms of the offer. On this understanding it may well appear that the above is an offer which can be turned into a contract by acceptance. If this be so all that is necessary is for the would-be purchaser to forward to Kay's Stores the sum of 6s. when the book will be despatched. Having examined the volume, the enquirer may return it if he is not satisfied. Now if this were the real legal position, the advertiser would be bound to everyone who forwarded the necessary remittance. He might well have more remittances than he has volumes in stock, and in order that this position shall not arise it is generally recognized that an advertisement of this kind is merely notice of willingness to treat, just as the prospectus of a limited company, although called an " offer " of shares, is really a notice that the company is willing to receive offers for its shares. Hence, when a reader of the journal in which the bookseller's advertisement appears writes to the advertiser enclosing 6s. he is making an offer based on the terms of the advertisement, and if he refers to the conditions laid down, it is open to the advertiser to accept the offer or reject it. He rejects it by returning the money, he accepts it by forwarding the book, and in so doing he binds himself to abide by all the terms that he himself has incorporated in the advertisement. The offer is complete when the applicant's letter reaches the advertiser's hands, and the acceptance turns the offer into a contract with the posting of the book.

It is not necessary that a letter should accompany the book, as an acceptance can be made either by word or by conduct, but from a practical business point of view, a *form letter* together with other advertising material would doubtless accompany the parcel. Mail order advertising is not carried out with a view to one sale only unless the advertiser specializes in one commodity only. It is the aim in general to secure a customer and by prompt service and careful educational propaganda to retain that customer. All the *follow-up*

material that is sent out to customers does not affect the particular contract under consideration, but it may be the groundwork for future bargains.

## The Trader's Rights.

Assuming that all contracts are based on offer and acceptance, the business man should make himself acquainted with his rights in relation to an offer that he has made, or an acceptance that he has received. Time is a very important element, as the time at which an acceptance purports to be made may govern the Courts in deciding whether a contract exists or does not. Sometimes a question arises as to whether a trader really has made an offer. In the case mentioned above the bookseller has made no offer, and where a person expresses to another his intention to offer goods to a third party, it does not follow that an offer exists. It is always a question of the intention of the parties. Where a trader circulates to his customers a price list, the list does not necessarily amount to an offer. It is like the bookseller's advertisement. The list is, however, of importance, as where it has been received by a customer and its perusal causes him to send an order, the terms of the list are incorporated into the offer to purchase. In accepting an offer all the terms of such offer should be agreed to, otherwise no contract exists and the supposed acceptance is in reality a refusal and a counter proposal. A trader writing to a customer offers him goods at a certain price provided the customer takes gross lots. The customer replies agreeing to take half-gross lots, but otherwise conforming to the trader's offer. *This* apparent acceptance *is a refusal* and the customer has made a new offer which the trader may or may not accept. In such a case the trader's acceptance could well take the form of the despatch of goods coupled with a notification of such despatch.

## When Acceptance is Complete.

Once an offer has been accepted it cannot be withdrawn, but at any time up to the minute of acceptance, it is possible to revoke it. It is therefore important to decide what is the minute of acceptance. We have seen that the offer is communicated when it is actually received by the person for whom it is intended. The rule with regard to acceptance is not the same. It is true that an acceptance is not complete until it is communicated to the person making the offer, but a legal fiction provides that the acceptance is communicated when the person making it has done all in his power to communicate it. Thus, if he uses the post for this purpose he has done what he can, and the matter is out of his hands when the letter is posted. It is therefore decided that the acceptance is complete and the offer turned into a binding contract by the posting of the letter of acceptance. Suppose goods are offered at 27s. per ton, subject to acceptance before 5 o'clock on the day following the offer. If the market rises and goods become worth 28s. per ton by 2 o'clock on the following day, the trader making the offer will be inclined to withdraw. He is entitled to do so unless before he takes advantage of his right the party to whom the offer is made accepts. Let us suppose the trader writes to his customers early in the morning, and posts the letter withdrawing the offer at 27s. and substituting a new one at 28s. If the customer, without knowledge of the letter of withdrawal, telephones at 2 in the afternoon, and writes immediately confirming his acceptance, the contract is complete. The withdrawal should have been telephoned so that the customer would be acquainted with the position at the time when he attempted to make his acceptance. In this case no contract would have existed.

## Mistakes.

Where estimates are given for goods to be supplied, these estimates generally amount to an offer subject to terms as to fluctuating prices and similar matters. In making such offers cases may occur in which errors creep in. Can a party knowing that the mistake exists accept and so take advantage of the other's mistake? Where it is perfectly clear that there has been a mistake, the acceptance does not bind the other party, but where there is no such evidence, the person making the mistake must, in general, stand to lose. Where goods are offered at 6¼d. per lb. and some thousands of pounds' weight are calculated and quoted in a lump sum, the person making the offer would be called upon to stand by any clerical error he might make in calculation. If, on the other hand, an offer is made to purchase goods for £2,000, and this is refused, the seller stating that he will take £1,200, there is clearly a ground for enquiry, as the refusal and counter offer is not business, and it would probably turn out that the £1,200 was a slip, the amount really intended being £2,100. Similarly, any obvious error would not be binding; on the other hand, where prices (to include carriage, insurance and revenue charges) are quoted, care must be taken to obtain accurate figures, for an offer of goods at an inclusive price may be accepted and the contract become binding, although the dealer may have omitted to include insurance in his calculation or based his figures on mistaken ideas as to cost of carriage.

## Essentials of Contract.

In the explanation of the term "contract" it was pointed out that the agreement must entail legal consequences, that is, it must be such that the two parties are in a position to insist on performance. In order that this may be so

certain essentials are necessary. Each must have intended to be legally bound and this fact must be evidenced by the formality of the undertaking or by the presence of a money value; that is, the contract may be in a deed or it may be supported by undertakings of a money value on each side. Money itself does not, of course, always enter into the bargain, but in a contract of sale money is the very heart of the agreement. *Sale* is a contract in which one person called the seller transfers the property in goods to another called the buyer for a money consideration called the price. So in sale we have a seller, a transfer, a buyer and a price. Where the transfer is to take place in future we have an agreement to sell, but the contract is still a contract of sale.

The contract of sale has all the marks in general and certain additional characteristics which distinguish it from other contracts, just as a locomotive has all the qualities of steam engines as a class and certain distinguishing qualities, such as flanged wheels, separating it from other steam engines. A contract of sale must therefore be intended to create legal responsibilities and must be made by means of an offer and acceptance. In addition, all contracts must be made so that they are free from flaws, they must be made between people legally capable of contracting, the subject-matter must be legal, there must be real agreement of mind between the parties, and the agreement must not have been obtained by fraud or misrepresentation.

Before a further consideration of sale of goods is undertaken it is well to consider the foregoing, as they affect contracts generally, but in so doing the principles will be illustrated from the selling of goods.

## CHAPTER II

## INCAPACITY TO CONTRACT

INCAPACITY in cash transactions does not need to worry the trader, as it is only in rare instances that a contract once executed and finished with is, in practice, the subject of revision. If, for instance, a tradesman takes advantage of a lunatic and knowing him to be of unsound mind supplies things which are not necessaries, the transaction might possibly be re-opened, even if cash had been paid. It is certain that a payment by cheque in such a case would be questioned. Generally, however, such incapacity as that of a married woman, or an infant, would not affect a cash transaction. When credit is given a trader takes much more serious risks, particularly in the case of infants; which term includes all persons under the age of 21 years.

### Contracts of Infants.

Years ago the contract of an infant was voidable by him unless it was for the infant's benefit. It was always open to the infant to confirm the deal on coming of age and some contracts of a continuing nature became binding without confirmation if they were not actually repudiated by the infant.

The law on the point has been altered by Parliament, since in 1874 the Infants' Relief Act laid down that the following contracts are *void*—

(*a*) For the repayment of money lent or to be lent;

(*b*) For goods supplied, other than necessaries; and

(*c*) On accounts stated or admission of money owing.

It must not be thought that it is illegal for an infant to borrow or buy goods or admit debts, nor that the law prohibits payments arising out of transactions with an infant. If the infant cares to pay he may, and in a transaction in good faith he could not recover money so paid. Nor, again, is a creditor prevented from suing for debts due on transactions included under these three heads. The contract is not *void* in this larger sense. Indeed, if an infant is sued and he defends himself with the defences open to an adult, e.g. denial of liability, previous payment, etc., judgment *may* be given against him if the money is found to be due, *unless* he expressly pleads in his defence that he is an infant.

It will be evident to the reader that, if he supplies goods on credit terms to an infant and the infant shelters himself behind his infancy, he will succeed only where the goods are necessaries. It is the business of the trader to show this and two things are required: firstly, that the goods are such as are usually required by persons in the infant's condition in life; and secondly, that he is not already provided with a sufficiency of such goods. A suit of clothes is without doubt necessary, but it is the business of the tailor to show that the particular suit is necessary and that the infant was not already well supplied with all he needed. This requirement of the law is a great disability to a business man, and the slogan should be "No credit"—to infants. A representation by an infant that he is over 21 will not alter the trader's position so far as his money is concerned, although the infant lays himself open to a charge of fraud.

Necessaries vary with the person's station in life: food, clothing, medical attendance, books for a student, tools for a workman, all are necessaries with the limitation as to adequate supplies stated above. It is for the judge to decide whether a given thing can be held to be a necessary in any event, whilst the jury say whether in the case under consideration it was in fact necessary.

The Infants' Relief Act further provides that a ratification of a contract by an infant is not effective, but this does not affect contracts of a continuing nature, such as the contract of a shareholder in a company under which he is liable for calls on shares. An infant may repudiate such a contract on coming of age, but should he take advantage of it after coming of age he cannot avoid his liabilities, as, for instance, the acceptance of a dividend after attaining majority will in a sense confirm the contract in spite of the Infants' Relief Act.

*By permission* *The B.T.H. Co., Ltd.*

INDIRECT LIGHTING IN AN OUTFITTER'S SHOP

(X-Ray Reflectors and Mazda Lamps are concealed in the tops of wall fixtures. Showcases are lighted by X-Ray "Scoopelle" reflectors)

## Married Women.

Dealings with a married woman are not so risky, as in the ordinary course of trade she is usually acting as her husband's domestic manager and purchases by her for household purposes will be found to be on her husband's behalf, and the husband will be liable. For her own contracts a wife is liable to the extent of her *separate* property. This expression, "separate," is a technical one, difficult for a layman to understand. Before the Married Women's Property Acts, the wife had not control of her property, but under these Acts what is really the wife's is separated from her husband's and is available for the wife's debts, but she is not personally liable. If a woman owes money at the time of her marriage she remains liable and her husband assumes liability if he has benefited by the marriage by any property being brought by the wife into the common stock. His liability for these debts is limited, however, to the extent of his benefit. Suppose a spinster has furnished a room on credit, and on marriage she takes to her husband War Bonds for £100, and these are sold, the proceeds being used for the purposes of the new household, then the husband will become responsible with his wife for the credit she has obtained to the

extent of £100 or such less sum as the War Bonds realized.

A woman does not become her husband's agent merely by marriage, and if the husband can show that he forbade her to pledge his credit and that he provided her with sufficient means for necessaries in the home, he will not be liable for debts incurred by her. It is wise therefore for a trader to open accounts in the husband's name and to write the husband's name on the pass book. This alone is not sufficient, but in a way it is evidence of intention to give credit to the man and not to his wife. It is really better to make arrangements directly with the husband. Alternatively the business man may require bankers' references and so make sure that the woman has some financial standing.

If credit is given to a man through his wife's agency and, without any demur, he discharges the liability, he thereby confirms the credit and becomes responsible for future debts. To avoid further liability he must *expressly* forbid the trader to give credit to the wife. If he forbids the wife to pledge his credit this is not sufficient, nor is a notice in the press that he is not responsible for the debts incurred by his wife sufficient to allow him to avoid liability to tradesmen with whom his wife has dealt on credit with his express or implied consent. Although it has been pointed out that the wife is not necessarily the agent of her husband, very slight implication will be sufficient to create an agency in domestic matters. The position of a housekeeper is very similar, but marriage makes it much more difficult for the man to repudiate liability. The best advice to a shopkeeper is to make arrangements as to credit directly with the husband. This requires tact and diplomacy in some cases, but these are virtues that retailers require to exhibit in all their dealings, and an additional exercise of them can do no harm. In mail order business credit should not be allowed; all transactions should be on the cash or deposit account system. Where husband and wife are living apart, the wife has still an implied authority to pledge her husband's credit for necessaries unless the separation is due to her fault.

## Illegality.

Where a contract is in itself illegal or is entered into for illegal or immoral purposes, the law will not enforce it. This phase of the law will not usually affect the ordinary business man, but it may be that a contract, free from taint on the face of it, is bad because the contracting parties are *both* aware that it is for improper purposes as, for instance, the letting of a room for illegal or immoral use, the hiring of a carriage for similar purposes, the printing of immoral or obscene literature, and a thousand other unsatisfactory arrangements. In all these cases the contract is void and if the bargain has been carried out on one side the other side cannot be enforced.

Gambling transactions are not common in retail trade, but it is quite possible to find contracts tainted with illegal wagering in the wholesale markets. Where, in a so-called contract of sale, the intention of the parties is not to deliver the goods but to pay difference in prices, the case is a speculation in the rise and fall of prices. Thus, if a buyer has the option to pay or receive, as the case may be, the difference between the contract price of goods and the market price at the time arranged for delivery, the contract is a wager and therefore illegal.

## Agreement of Minds.

In any contract the minds of the parties must act in unison. Where their minds are not directed to the same subject-matter there can be no agreement and no contract. If a customer enquires the price of a costume in the window, and states that it is the fourth from the right, and she is counting from the right outside whilst the salesman is counting from the right in the shop, the price fixed will not be binding and no contract can exist as the minds of the parties are not directed towards the same object. We have seen that a mistake is usually ineffective, but where the mistake is fundamental, going to the root of the contract, the effect is to avoid the agreement. If both buyer and seller understand which costume is under discussion the fact that the salesman says three guineas instead of five does not affect the case, as both are concerned with the same thing and carelessness or accidental error is not a mistake going to the root of the matter.

It is important, particularly in credit transactions, that parties know with whom they are dealing. Mistakes as to identity are fundamental. Kay has been accustomed to deal with May, and the latter has held the former in high esteem as a sound man and a good customer to whom credit can be extended. Suppose Kay sells his business to Ray, who continues it under the old name, and without notice of the change Ray orders goods in the firm's name from May who accepts the order on the usual terms. Should May discover the facts he is not bound to complete the contract, as he has no idea as to Ray's stability. In fact, no contract exists between May and Ray.

# CHAPTER III

# FRAUD AND MISREPRESENTATION

Where agreement has been reached, owing to a fraudulent statement, there is really no agreement, as the minds of the parties are not working along the same lines. In the sale of goods either party may be guilty of an attempt to deceive

*Photo* *Kealeys, Ltd.*

A GENERAL SALES OFFICE

(Industrial Rubber Products, Ltd.)

*Frontispiece*

exists, and terms are used which have very definite meanings. In order that a custom may be incorporated into a contract it must prevail throughout the trade, it must be known and recognized, and it must not be optional. Rules made by a firm of owners of multiple shops do not bind customers unless they are universal, that is, applicable in the trade generally. Such usages must be reasonable and if it is for the benefit of one side and the other is ignorant of it, it may not be enforced against him. If he usually deals in the market and could have known it he will be bound by it and more strongly if he knew that it existed. Where a buyer buying in the Newcastle coal trade contracts to take "about" 500 tons, the seller by custom is allowed a margin of 5 per cent above or below, so that 525 tons or 475 tons would satisfy the contract. Implied terms can always be waived or the parties may agree to exclude them.

CHAPTER IV

## PARTICULAR RULES AS TO SALE

All the rules that have been considered in relation to contracts in general apply in the contract of sale, but in addition there are collected in the Sale of Goods Act of 1893 special rules which particularly apply to sale of goods. On page 531 will be found a definition of the contract of sale and this need not be repeated. It should, however, be noted that the term "sale" includes the transfer of property in goods immediately and also the agreement to transfer which is really a sale when the transfer is completed. The reader will doubtless wonder why in discussing sale, the expression "property in goods" is used and not the simple idea of "goods" themselves. There is a very important reason for this for a sale can, and often does take place without the *goods* being transferred at once. Suppose furniture is bought for a new home not ready to receive it, and an arrangement is made for *future* delivery, it is clear that a sale has been effected, although the goods have not been transferred. The goods have been selected, they are ready for delivery and are put aside as sold—they are the *property* of the buyer but he has not got possession. Thus, although the goods have not passed *the property in them* has gone to the buyer. Property here does not mean the goods but all the rights of ownership.

### Ownership.

Arising out of this comes the question of ownership generally, as with ownership risks arise. If we can fix ownership we can also fix risk of loss by fire, deterioration and other loss, since usually risk of loss will fall on the owner of goods and not on the holder, unless he is in fault or some special rule fixes him with liability, as in case of a carrier.

### The Time when the Goods Become the Buyer's Property.

In any contract the parties may within very wide limits make what terms they like, and in a contract of sale the seller may arrange with the buyer at what time the goods shall become the buyer's property. In many cases this point is left to chance, and special rules depending on a variety of circumstances are laid down to meet this fact. It is important to notice that the time when the goods become the property of the buyer does not depend on delivery or credit but upon other facts of the sale. An examination of the rules in simple language will indicate the root idea that the passing of property depends upon the goods themselves.

On one occasion a person visiting town saw a chair in an antique shop. He inquired the price and was told that it was £7 10s. Finding that he had not sufficient money with him he arranged to pay £2 10s. and send a cheque for the balance on the following day. In his turn the dealer arranged to deliver the chair on receipt of the cheque. This is a *sale* and not an agreement to sell, and the question of ownership now arises. The chair belongs to the buyer at the moment the bargain is agreed upon, although for convenience it remains for a time on the seller's premises. The point is material for if without carelessness on the dealer's part his premises are destroyed by fire, and the chair is lost, the loss falls on the buyer. He cannot recover his £2 10s. and legally the seller may claim the cheque for the balance without being called upon to compensate for the lost chair.

### Seller's Lien.

This position can be utilized to illustrate other principles of universal application in English law. Despite the fact that the chair now belongs to the buyer, the seller has certain rights of control. Until he receives the buyer's cheque he may hold the chair and refuse delivery. This is known as the "Vendor's right to lien," which is merely the right to retain the goods until payment, where no credit has been given. Where the dealer is so unbusinesslike as to send off the chair before receiving the buyer's remittance, he loses the lien, but he is not wholly without remedy. Suppose, after handing the goods to the carrier, he finds out that he is dealing with a "man of straw," who is actually insolvent, he has the right to countermand the instructions to the carrier and to require him to return the chair and not to deliver it to the buyer. This is called his right to "Stop in transit," and it can be exercised by a dealer who has not been paid where he hears of

the buyer's insolvency. The fact that he gives the buyer credit does not prevent him exercising this right.

## Goods not Ready for Delivery.

Let us return to a consideration of the rules for the passing of property. In our last example the chair was ready for delivery, it could be pointed out as *that* chair or as the lawyers say, it was "ascertained and specific." Suppose, now, the imagine a case in which the buyer is so diffident as to order *a* chair—something altogether unascertained. It will be necessary for the seller or the buyer to select something to satisfy the order; this is called "appropriating specific goods" to fulfil the contract. If the buyer selects, the seller may not be willing to sell the particular chair, or if the seller selects the buyer may reject; where, however, a selection is made by one of the parties, and the other is satisfied, the position

*Photo lent by* *Messrs. Fredk. Sage & Co., Ltd.*

WELL-EQUIPPED SHOWROOMS
Of a Tailor and Outfitter

order was for *that* chair but it was unfinished, it needed polishing and upholstering, then the rule would be different. In the first case the *goods* were ready for transfer so *the property in them* passed; in this new case the goods are not ready and it is reasonable that the property should not pass until they are put into a deliverable condition, that is, polished and upholstered *and* the buyer is notified of the facts. Any risk of loss lies with the seller until this requirement is complied with, but after notice the risk is with the buyer.

To carry the reasoning a step further we may is as in the first case, the property passes and the risk is on the buyer. A "nice joint of beef about five pounds in weight" is an order for unascertained goods. The appropriation of a particular joint to fulfil the order is left to the butcher. But he cannot bind his customer to his selection. If we compare case one with the present case the matter may be made plainer. Should the customer point out a joint and say that he will have it he is bound by his choice, and risk of loss is with him, but where his order is not selected by him risk does not fall upon him until he agrees with the butcher's selection.

## Goods on Approval, Etc.

The position of goods "on approval" or "on appro.," or "on sale or return," may cause a little trouble. The trader should be quite clear as to his position. An example of sale on appro. is given in the bookseller's advertisement on page 531. There on receipt of 6s. the bookseller is willing to forward Thackeray's Ballads post free *on approval*. In this case an applicant pays his money first and then actually receives the goods, but *until he approves*, either verbally or by conduct, the property in the book remains in the bookseller. Of course, the applicant may not hold on approval for ever. He may have a week to decide and if he retains it beyond the week the property becomes his, that is, he must approve or disapprove within the agreed time, or if there is no time stated then within a reasonable time, after which property passes. Suppose that within the time given for approval to be expressed he says nothing, but acts as if he were the owner; say, he lends the book to a friend or sells it, then property passes to him from the moment he acts as proprietor.

Only one case remains for consideration, that is, the case of a purchase in bulk, the price depending on some act to be performed by the seller. On the purchase of a stock of sugar, weight unknown, at 5½d. per lb., the buyer knows what he is buying, but he cannot know the price until the sugar is weighed. The risk is not his until the sugar is weighed, and he is informed as to the price. If before weighing, the sugar is lost, the loss falls on the seller. Similarly where goods are to be measured or tested to ascertain their value, the property passes when the testing is performed and the price communicated.

CHAPTER V

# PARTICULAR RULES AS TO SALE (Continued)

PRICE is a matter going to the root of the contract of sale. The consideration must be *money*. If the consideration is other goods or services, the contract is not a sale but an exchange, and the rules as to sale of goods will not apply.

## What the Price is.

If goods are bought without mention of price, the buyer will be called upon to pay a reasonable price, and he cannot object to the market price at the date of delivery being charged. In some contracts, where the parties cannot agree as to price, they may agree that the contract price shall be that fixed by a third party. Should the third party fail to fix the price the contract fails, unless the buyer has had the goods and they cannot be restored. In such a case he is bound to pay a reasonable price.

Contracts of sale can be by word of mouth or in writing, and there is nothing to prevent the honouring of any undertaking, whatever its value, where the contract is verbal. Differences may arise and the matter may be litigated upon, and should the value of the goods included in the bargain be of £10 or upwards, difficulties will appear if the agreement is a verbal one.

## Contracts of £10 or Over.

Section 4 of the Sale of Goods Act lays down that "a contract for the sale of any goods of the value of £10 or upwards is not enforceable by action, unless the buyer shall accept part of the goods so sold and actually receive the same, or give something in earnest to bind the contract or in part payment, or unless some note or memorandum in writing of the contract be made and signed by the party to be charged or his agent in that behalf." This does not mean that parties may not make such contracts verbally, nor that an action may not be brought. It does mean that if an action is brought and the party against whom the contract is sought to be enforced pleads that this section is not complied with the action will fail. Contracts exceeding the value of £10 are carried out daily on the word of the parties, but a tradesman should know the position in case of a repudiation. To prevent the question arising he should demand a deposit or a note of the bargain. The third possibility is more difficult to understand, namely, "accept part of the goods so sold, and actually receive the same." At the first glance it would seem that this requirement is ambiguous, but there is a great difference between "receipt and acceptance." The meaning of the latter must be sought in the Act itself, which says that an acceptance of goods for this purpose is the doing of some act by the buyer in relation to the goods which recognizes a pre-existing contract of sale, although there is no acceptance of the goods to satisfy the contract itself. "Receipt" has its ordinary meaning and both acceptance, as indicated, and receipt must be present. In one case a person agreed to purchase hay, and he had paid nothing, nor was there a memorandum of the bargain. The hay was delivered and he took out a sample and examined it. He said: "The hay is not to my sample, and I will not have it." An action was brought and the buyer tried to claim that there was no receipt and acceptance. Clearly, as he had examined the hay, he had received it, and his act in comparing bulk with sample was a dealing with the goods sufficient to indicate a pre-existing contract of sale.

### Note or Memorandum.

The note or memorandum which will be accepted as sufficient to prove the existence of a contract of sale is required as evidence merely, but it must show the terms of the contract accurately and fully. You cannot prove the contract by a document and then claim to incorporate terms by oral evidence. In particular, the parties must be indicated by name or in some way sufficiently described, the price must be stated if it is fixed, and the goods must be accurately specified. It need not be made when the bargain is struck, provided it is in existence when the action starts. No special form is called for and it may be contained in several documents, such as a series of letters, provided they are connected one with another. For this purpose references in letters and expressions, such as "Your letter of the 4th October regarding our telephone message asking for a case of ——, etc.," will be valuable, in spite of the modern demand for the abolition of such formalities. The signature of the parties is not such a signature as is required in a formal document. If a purchaser makes out an order on his own printed order form bearing his name, the printed heading would be sufficient signature for the purpose in hand. No stamp is necessary on a note of a contract for sale of goods, as such contracts are specially exempt from stamp duty.

### Discount.

Whilst on the subject of price we may consider the question of discount. In business transactions, two forms of discount exist, namely, cash discount and trade discount. The former is a device for securing prompt payment; it is an allowance made to a customer in return for the convenience of ready money. Terms of payment may be cash immediately with no deduction or payment in future with a stated period of credit. In credit cases an option to pay cash is given and a reduction in price allowed. This reduction can be claimed only where cash is paid.

Trade discount is usually a device adopted to give special terms to certain persons or to provide for fluctuations in market price. Catalogues and price lists are printed with nominal prices quoted. A separate statement is supplied that prices are subject to a certain discount. To secure Ray's custom May may quote catalogue prices, less 25 per cent, whilst he may be willing to allow Fay 20 per cent only. On the other hand, at a given moment the true trade price to all customers is catalogue price, less 25 per cent. If prices advance the catalogue is not reprinted but the discount is varied. It may become 20 per cent on certain goods and 15 per cent on others. The advantage of this expedient is clear. If the prices quoted are true market prices, any increase in cost appears as an increase in price, whilst with the discount arrangement the price always appears with a greater or less reduction, hiding the true facts from the careless or unobservant.

Where nothing is said as to time for payment, a cash transaction is implied, but the seller cannot sell elsewhere merely because the buyer is not ready to pay when delivery is offered. In such a case the buyer cannot have the goods until he tenders payment and the seller can exercise his lien (p. 537), but the trader may sell elsewhere if the buyer is unwilling to pay after a reasonable time. What is reasonable depends on the nature of the goods. A trader would be justified in re-selling perishables.

## CHAPTER VI

## TERMS IMPLIED IN SALE

We have seen that contracts consist of a number of terms and a little thought will assure us that some of the terms are more important than others. The very existence of the agreement depends on some of the terms, whilst others are merely side issues; important, no doubt, but not vital. The important terms are conditions, whilst the less important are called warranties. The difference between them should be noticed, as where a condition of sale is broken the injured party has the right to consider the contract at an end, provided the property has not passed to him. In any case of a broken term the party complaining may sue for damages, and if the term is a warranty only, damages will be the sole remedy. In Scotland the distinction is not important, as the buyer can repudiate in case of failure of the seller to comply with any material part of the contract.

Many terms are implied without express mention and it is to such terms that a tradesman should turn his attention. To what extent he assures his customer as to the fitness and quality of goods sold and his right to sell are important questions. There is no difficulty where the parties *expressly* agree but doubt may arise where the law implies conditions of sale.

### Title to Goods.

First, as to title; it is clear even to a layman that when a man sells goods he represents to the buyer that he has a right to sell, that is, that the goods belong to him or they have been entrusted to him with a view to sale. This condition, that the seller has the "right to sell," means that he has not stolen the goods and that his title to them is better than anyone else can claim. It is a maxim in English law that a man cannot give a good title if his own title is defective. The rule is subject to exceptions, the most important being that of a sale in *open market*. Suppose certain silver plate is stolen and part of it comes into the possession of a dealer, who innocently exposes it for sale in his window. A

customer purchases it and the goods are finally traced into his possession. Two possibilities arise, firstly, the shop may be in the City of London or it may be part of a fair or market in the provinces, where goods of the kind are ordinarily sold. If the market is really an ancient market held by custom, or the shop is in the City, the purchaser is protected unless the owner of the goods finds the thief and has him convicted. A sale of this kind is said to be in open market, provided it is in the ordinary course of business, open and above board, and the goods are such as are usually sold in the establishment concerned. The second possibility is that the shop does not answer the above description. It may be an ordinary silversmith's shop in the provinces or outside the City. Then the purchaser has no title ; the person from whom the goods were stolen can reclaim them but the purchaser is entitled to his money back from the shopkeeper, and he, in his turn, from the person who sold the plate, and so on back to the thief.

## Quality.

When you buy goods without inquiry or restriction, as buyer, you are assumed to take the risk that the goods are what you think they are, that is, it is for the *buyer* to be on his guard. The circumstances of the contract may be such, however, that the seller places himself under obligation to protect the buyer. Where goods are sold by description they must comply completely with the description. A purchaser of mustard should not be supplied with an article mixed with flour or what is known as " condiment mustard," unless he requires such mixture. A grocer should inform him of the facts. Where Jay buys lard from Kay and it is found that the lard contains 15 per cent of added water, Jay has not received goods answering to his description, and apart from the Sale of Food and Drugs regulations Jay may reject the goods. If May desires to buy coffee, Ray must not serve him with " French coffee " without expressly arranging to do so, since " coffee " is not a description of a coffee mixture.

Where the sale is by sample the goods must in bulk correspond with the sample. The mere fact that a negligible portion of the goods is not up to sample is not fatal to the contract, but the whole of the goods must be according to description. If Fay orders a dozen pounds of " Victoria Plums," like a sample submitted by Hay, the greengrocer, Hay may have fulfilled the contract, although some few of the plums are bruised or of small size, but he cannot make up weight by adding a pound of " egg plums," as these do not conform to the description of " Victorias." Every sale in which the buyer has not seen the goods is a sale by description, and the seller undertakes that the goods supplied exactly fit the description.

Where quality is not mentioned goods of inferior quality may comply with the description, and it becomes a question of fact whether the particular goods fill the order. If the purpose for which the goods are required is disclosed, and the tradesman who is to supply them deals in such goods, and the customer relies on his judgment, then the goods must be reasonably fit for the particular purpose disclosed. In a case before the Court of Appeal it was held that the purchaser of a hot-water bottle required an article fit to hold hot water, and the sale implied a warranty to this effect. It seems a small matter but great consequences may attach to it. It is seen that the mere description of goods may be sufficient to indicate the purpose for which the goods are intended, but if the buyer does not leave the matter to the seller's judgment but relies on his own knowledge, there is no condition as to fitness. Again, the buyer may rely on the seller's skill, but no implied condition arises if the seller is not a dealer in the goods in question. If I ask my butcher as a favour to supply me with a chicken for lunch he does not in any way warrant its quality unless he does so expressly.

Retailers, who sell proprietary articles under a trade name or a patent name, do not warrant the article as fit for the particular purpose in hand. The tradesman simply sells the article and his task is done. If Jay stocks the " Eureka patent fuel saver," and sells it to a customer who has inquired for it, the fact that it is useless in the customer's grate is no ground for demanding that Jay shall relieve his customer and return his money to him.

# CHAPTER VII

# SPECIAL RULES REGARDING CERTAIN GOODS

Special rules as to purity and quality of certain goods, chiefly coming under the description of foods and drugs, have been in force for many years. Many of the statutes dealing with this matter were originally aimed at preventing frauds on the revenue and were intended to stop the manufacture of imitation tea from British grown produce, such as the ash, elder and sloe. Similarly, the sale of coffee weighted with added fat was prohibited as tending to injure fair dealers and to " prejudice the health of His Majesty's subjects."

In the Sale of Food and Drugs Act it is laid down that a dealer may not sell any article of food which is not of the nature, substance and quality of the article demanded by the purchaser. This is quite apart from the ordinary rule as to articles conforming to description. Any offence under the above regulation may be visited by a

penalty not exceeding £20. Guilty knowledge is not essential and if Jay, the milk roundsman employed by May, supplies to Ray milk with 12 per cent of added water, Jay may be convicted. There is some protection for vendors, however, and if Jay was a retailer who had bought milk from May, under a written warranty of purity, and Jay sells the milk as he receives it, Jay will be able to put in a good defence. May is, of course, liable in either case. If Jay had added the water May can be proceeded against for his servant's wrong, and even if May is innocent he may be convicted; of course, the penalty will be higher if he is acting in collusion with Jay.

If a purchaser demands butter the article supplied must be unadulterated butter, and tea must be unadulterated tea; for example, a commodity known in the trade as green tea and treated abroad with chemicals to secure the colour, is adulterated and even when sold as "green tea" an offence is committed. The point in this connection is the injurious nature of the added substance.

If the added substance is not injurious the label on the packet must plainly and distinctly state that the article of food is mixed and even in this case it must be clear that there is no fraudulent intent to increase the weight. The marking must be understandable and a label on cheese stating it to be "Valley-field finest oleine cheese" is no protection as the public does not know what "oleine" signifies.

The law may be enforced by any purchaser but the tradesman should know the procedure. The purchaser must immediately notify the seller that he intends to have his purchase analysed and in order that the shopkeeper shall be protected from fraud the purchaser, who may be an inspector, must divide his purchase into three parts to be sealed up and marked. The tradesman is entitled

One of Pollard's "Kwikserving" Interiors

to one part for independent analysis ; of the other two parts, one is retained for future use, if necessary, and the second is sent to the public analyst. If the analyst's certificate justifies the course, a prosecution follows.

## Butter and Margarine.

Special rules are laid down in the Margarine Act, 1887, and in the Butter and Margarine Act, 1907, as to the sale of these commodities. Special particulars as to constitution, wrappings, printing on wrappings are laid down and these should be studied by the grocer and dairyman commencing in business.

Packages containing margarine or margarine cheese must be branded with the name in full, and the name must be on the wrapper itself, not on a ticket. The letters must be block letters not less than half an inch long, and no other printed matter must appear on the paper except any fancy name allowed by the Board of Agriculture. Such name must not be printed larger than the word " margarine " and it must be in the same colour. The Board will not allow any word suggesting " butter " or dairy interest. Thus, a mixture with butter cannot be called " butterine."

Margarine exposed for sale must be marked with a label printed in block capitals, not less than an inch and a half square, with the word " margarine." Sale of sandwiches or bread and " butter " in a restaurant is not exposing for sale, and where a notice that a mixture of best Danish butter and margarine was used and exhibited it was held that the law was not broken. If Mrs. May asks for one pound of margarine and as a special favour desires that it be wrapped in a plain wrapper Mr. Ray, her grocer, an obliging fellow, will break the law by complying.

## Other Commodities.

Traders in other lines of business run certain risks which may be incurred innocently. Thus, a draper selling flannelette should be careful not to describe it as " non-flammable " unless he is sure of his ground. Sale of flammable material under a false description lays him open to prosecution. This rule is a protection for the benefit of poor people who may be led to purchase and fail to take the precautions against fire which are usually necessary in the case of flannelettes.

## Proprietary Medicines.

Many grocers and dry-goods stores stock and sell patent medicines and remedies, and it is well to note that this is illegal unless a licence is first obtained. The licence for the maker, compounder, vendor or owner of a proprietary medicine is 5s, per annum. An applicant for such licence gives notice to the Chief Commissioner of Customs and Excise, setting out in writing the address of the shop where he wishes to sell or make the goods. He must from time to time, as necessary, notify any change in the address. In addition to the licence to sell, the maker or compounder is liable to pay an *ad valorem* duty on the output. This duty is based on the selling price of the article and is paid by means of labels issued by the Customs and Excise. Labels are obtainable in packets and must be affixed to the right amount before delivery to the retailer. The retailer is under a duty to see that the package or bottle is duly stamped. If unstamped he should return them or lodge them at the nearest stamp office or with the Commissioner of Excise at the head office. Failure to do this may be visited with a penalty of £20. All offences in relation to proprietary medicines have a £20 fine attached, except that of failing to notify address from which sales take place; this more minor offence is valued at £10.

The right to sell drugs, although not specifically dealt with in the Acts, is limited by implication to chemists and druggists, and no medicine in the *British Pharmacopea*, published by the General Medical Council, may be made up by an unqualified person. There are, however, concoctions made up which contain drugs, but as proprietary medicines they may be sold by persons other than chemists and druggists duly qualified.

A proprietary medicine includes all pills, powders, lozenges, tinctures, potions and waters (except artificial mineral waters) intended for use, externally or internally, as medicines for the prevention, cure or relief of any disorder, where the maker or vendor claims either a secret or occult art, or an exclusive title to make the remedy.

Any pills made under letters patent are proprietary remedies and are also known as patent medicines. This latter name is the popular, though incorrect, title for all substances under consideration. The point of greatest importance, which brings substances under notice of the Revenue, is the recommendation by public advertisement of the substance for the relief or cure of illness.

Ginger, peppermint and similar articles are not in themselves dutiable, but if sold as medicines or as beneficial for the prevention or cure of disease, they come within the Revenue laws. Tooth powder is not dutiable but the question might arise if it is advertised as a cure for diseases of the mouth.

# CHAPTER VIII

# RIGHTS AND REMEDIES ON SALE OF GOODS

NATURALLY both buyer and seller have rights and remedies to enforce the rights arising out of the contract. The rights of the seller depend

upon whether the property in the subject-matter of the contract has passed to the buyer or not.

If property has passed and goods have been delivered the seller has a right of action for the price, but if the buyer refuses to take delivery the tradesman has an alternative to an action for the price. He may sue for damages which in this case is the amount of *direct* loss resulting from the buyer's failure to complete his bargain. The loss will be the difference between the price the goods would fetch at the date when delivery was tendered and the contract price. Thus, if a contract is made for the sale of 500 tons of coal at 27s. 6d. per ton, and the buyer refuses to take delivery when the price has fallen to 25s. per ton, the loss entailed by the seller who throws the coal on the market is 2s. 6d. per ton and the claim for damages will be the sum of £62 10s. What this amounts to is that the coal dealer may not keep the coal and also the price. If the dealer sells the coal at 27s. per ton he may still claim the loss as based on market price at the time of the purchaser's refusal to take delivery.

Until property has passed the seller cannot sue for the price unless payment before delivery is contracted for. The usual remedy in case of breach where property has not passed is an action for damages.

The seller who is unpaid and has not made delivery has also a right of lien and stoppage in transit, as described in Chapter IV (*q.v.*).

## Instalment Contracts.

Where delivery of goods in a contract of sale is made in instalments, the seller may fail to deliver or the buyer to accept delivery of any instalment. The rights of the parties then turn on the agreement. The failure of one instalment on either side entitles the injured party to sue for breach, but without evidence that the failure means failure on future instalments also, the injured party cannot consider the whole contract as ended. If Jay orders a certain kind of cloth to be delivered to his factory in lots of so many pieces per month, he may not rescind merely because one consignment is below sample. His remedy is to return the goods to May. The test is whether on the facts the conduct in relation to a particular instalment amounts to a refusal to perform the contract according to its terms. May refuses to deliver a further instalment until a prior one is paid for. In this case May is wrong unless he knows that Jay is insolvent or that Jay's refusal to pay was an intimation that the contract could go no further. Certainly May has no lien on this month's instalment of goods for last month's instalment of price unless he has a term to that effect in his contract.

## Buyer's Rights.

The buyer has rights against the seller under which he may claim delivery, but unless the parties are agreed the place of delivery is the seller's place of business. If the seller undertakes to deliver, the place of delivery is in the direction of the buyer and the seller remains liable for the safety of the goods until delivery takes place as directed. Sometimes the buyer asks that the goods be handed to a carrier, and in this case the carrier is the agent of the buyer to take delivery. If the goods be damaged in transit in such a case, the *buyer*, not the seller, must claim from the carrier.

If the seller fails to deliver the goods the buyer sues for damages for non-delivery. The loss recoverable is the difference between the contract price and the current market price at the time when delivery should have been effected, since the market price is what the buyer would require to pay elsewhere. Sometimes damages arising out of the particular circumstances of the contract may be recovered in addition. If special circumstances exist and have been disclosed to the seller, he may be responsible for special damage but this is unusual. If Jay sells to May and before delivery May contracts to re-sell to Ray, May cannot recover for loss of profit on his sale to Ray should Jay fail to deliver. Jay will be liable only for the general damages mentioned above.

Sometimes in a contract of sale a deposit is paid and it is agreed that it be forfeited if the buyer fails to carry out his bargain. The seller is legally entitled to this without proving damage.

Another remedy of the buyer is his right to reject goods not in accordance with the contract, but the seller may offer other goods within the limit of time fixed for performance of the contract.

If a purchaser leaves goods with the vendor after property has passed, he runs a certain amount of risk. For should the vendor sell again the goods are lost to the original purchaser and he is left with his right to sue for damages. Thus, if Jay buys a chair from May for £5, and arranges to leave it for future delivery, May may find a customer willing to pay £5 10s., and a sale on these terms would be binding on Jay, provided the new customer was unaware of Jay's purchase.

SECTION 23

# Show Cards: Their Design and Production

## TICKET WRITING WITH PENS, BRUSHES, CHALKS, PASTELS—STENCILLING—COLOUR SCHEMES—MATERIAL REQUIRED—HOW TO PRACTISE TICKET WRITING.

By F. Arthur Pearson

The necessity of show cards is, of course, undisputed. It is, perhaps, not realized by everyone how great are the advantages accruing from a detailed study of their wording, ornament, and production.

Our minds are, certainly through all our waking hours, open to the myriad forces of suggestion. The customer's mind must be considered from this standpoint. Just as brightly polished windows attract shoppers and breathe a suggestion of cleanliness, quality, and efficiency, so a card of correct design, harmonious colour, stylish print, and faultless accuracy denotes high quality and careful manipulation of the goods it announces.

The virtue, moreover, of cards which are just a little different from those of anyone else is not to be lightly esteemed.

The hand-drawn card is the means whereby these virtues may be obtained, and, however simple are the designer's efforts, they will improve by study of the elements of the art.

### The Alphabet.

The basis of all ticket design is a *real* knowledge of the alphabet. Pick out from any modern book a complete alphabet of capitals. Copy them with an ordinary pen on any smooth paper. Press heavily on down-strokes and go lightly up. Go over no stroke twice, but complete each letter in as few strokes as possible. There are certain letters very easy to draw wrongly. Check yours carefully, and should any, such as K, N, S, and Z be wrong, print the correct form several times, so as to destroy your old, wrong habit.

The commonest and worst error in this type is misplaced thickening of the strokes. Be scrupulous to see that none of your letters errs thus. The pen, the original printing instrument, is the cause of these changing thicknesses. The eye is so accustomed to their arrangement that a change, in this style, is unpleasant. Other styles, produced by other instruments, have other characteristics.

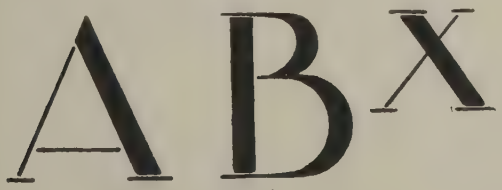

Fig. 1

Now group your letters. Some are entirely straight-lined, as L, F, N; several are based on the ring, as C, G; others are looped, as P, B; one or two have great width; half-a-dozen are top-heavy, as F, T; a few consist chiefly of uprights, as I, L, H. All these points, with others, become matters for consideration when you are deciding what style you shall employ for a certain card.

### Small Letters.

By a similar process of copying and examination make yourself master of the small letters. These

Fig. 2

are the letters which custom makes most clear to the reader's eye. So, when you have an announcement of prime importance, employ this type—suitably denuded of obscuring ornament.

### Unity of Style with Simplicity.

The first and final quality that the student should ensue is unity of style—and it should be coupled with simplicity.

The beauty of lettering lies in its form, and not in trimmings superimposed like false hair. Let us examine the production of an alphabet like that partly shown in Fig. 2. Draw the

Fig. 3

outer-most guides. Note that the third guide line is higher than central. This, by magnifying the lower parts of the letters at the expense of the upper, avoids the ugly possibility of top-heaviness in style. Do not make the tops *too* small (Fig. 3). Over-diminution makes the letter unfamiliar in appearance and hence less legible. The third line will now mark the position of numerous cross-bars and loops, as in B, E, H, M—but not always of A, which gains in appearance by lowering the horizontal.

With four guide lines (Fig. 4), equidistant, your

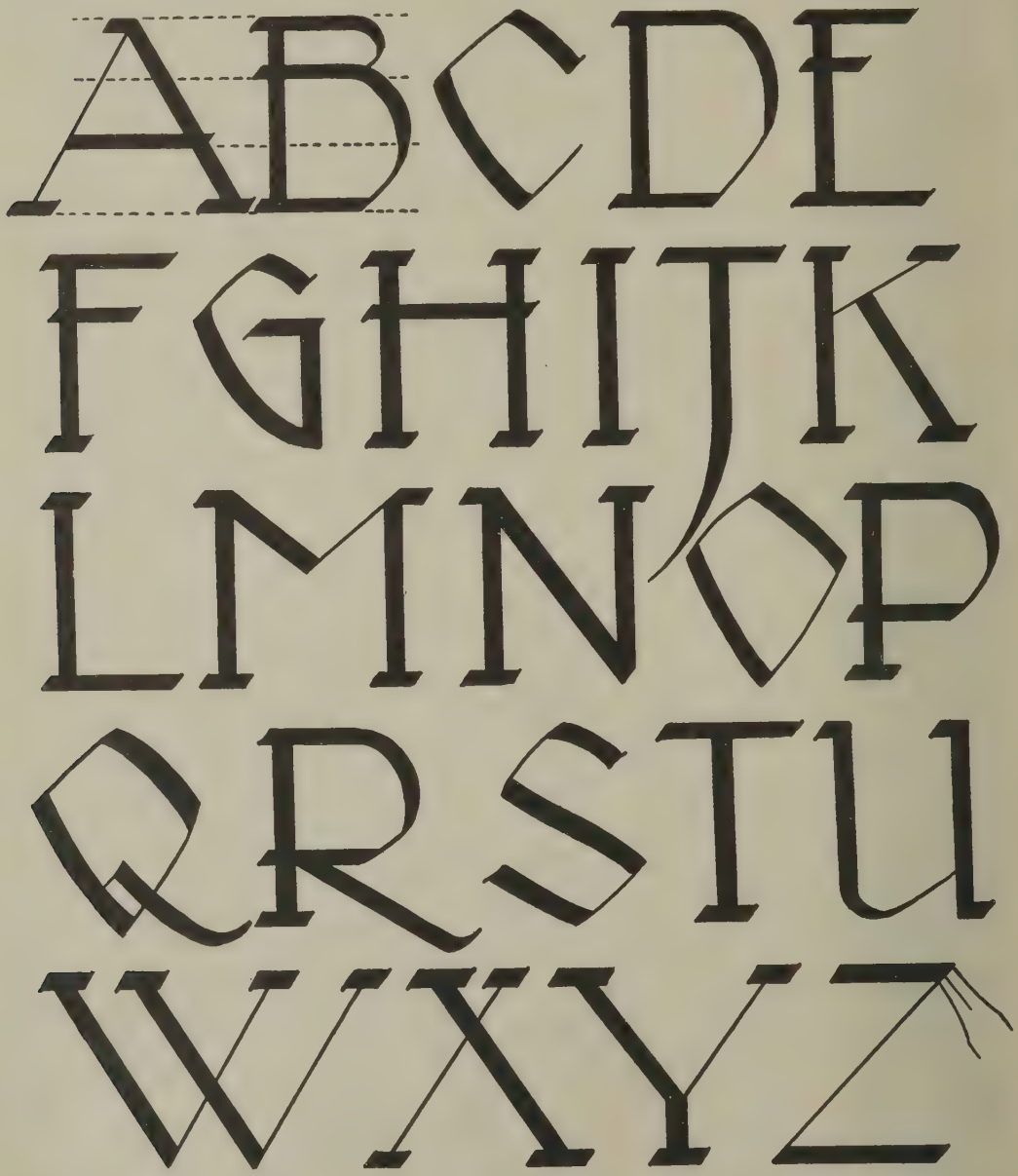


FIG. 4

work has greater freedom. Mark the loops now of P and R, and note the added grace of E and H with cross-bar high. The set-square must be utilized to ensure that these uprights are indeed vertical, or, if a sloping style is employed, that the slope is constant. Letter width is also a matter for thought. For clarity and best appearance, let the width of most letters be two-thirds the height—but do not let this rule crush M or W, nor prevent you from making all your circular

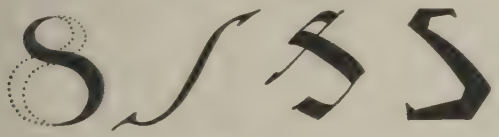

Fig. 5

letters full and round if you wish. Observe the foundation of the difficult S (Fig. 5), and note the suggested methods of avoiding this form.

Lower-case (small) type is similarly built between guides. Extreme lengthening of the strokes yields a very distinguished style of high legibility, owing to its enforced open spacing (Fig. 6).

Proportion must not, then, be neglected, but

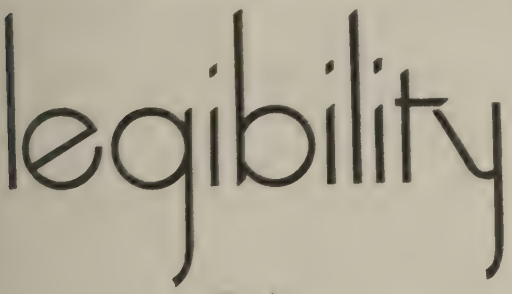


Fig. 6

the chief factor in the production of style is the instrument employed. Pen, brush, chalk, knife, all differ widely in action and in result.

## Use of the Broad Nib.

The broad pen, the most useful of printing instruments, produces the various letters shown in Figs. 4 and 7. Every card producer should make himself master of this instrument. Various metal forms are upon the market, and are here depicted, but they are only substitutes for the real thing—which is either a quill or a reed pen. The latter are not available everywhere, but may be obtained from the publishers of this work. These nibs do not spread under pressure. Width

Fig. 7

of stroke is influenced by using the pen squarely, obliquely, or edgeways. In Figs. 2 and 4 the pen was maintained throughout at the angle shown. A change of angle means a change of style.

The angle between pen and card, and the card angle are equally important. Support the card at such a slope that you can comfortably keep the pen horizontal in use. Printing pens hold much ink and will flood if sloped downward.

Split nibs spread, therefore the stroke is varied by pressure. A totally different style is the result.

## Brush Work.

Brush styles vary. The ordinary round brush, when normally charged with colour, may be likened to an extremely flexible nib. It will taper to a hair-like point, or fan out under pressure. The spring of good hair restores it to its pointed form. Its stroke is like that of a split nib, but the instrument is far more supple. The typical

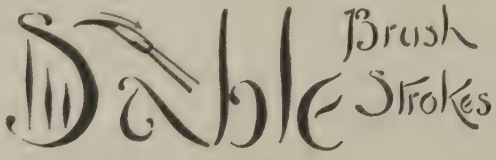


Fig. 8

brush form, and some modifications, are shown (Fig. 8). One rule must be observed. A nib may be drawn sideways—a brush never.

Load a brush very heavily with colour and the liquid "balls" at the end. A new style results (Fig. 9). No finely pointed strokes appear, but

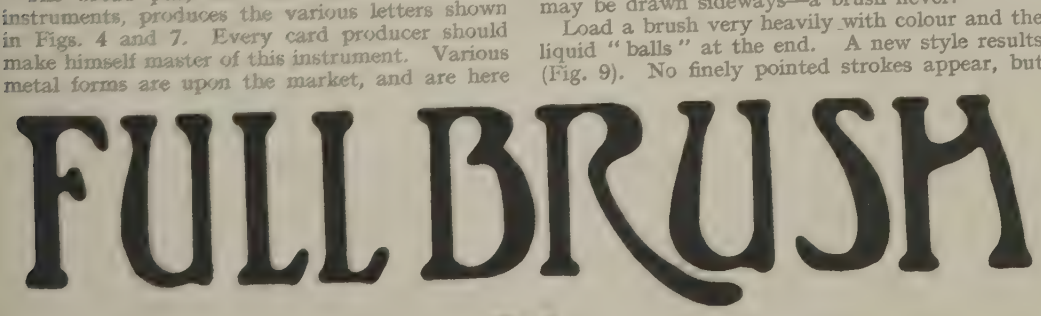


Fig. 9

strong, rounded forms, suitable for big, bold announcements.

A couple of small-sized brushes, clipped square at the ends, are useful at times in printing—especially on a soft-faced card which does not stand pen pressure well.

## Chalks.

Chalk has its own characteristics. It is used on a rough surface, to which grains of it cling—many or few, according to pressure. The average chalk card is not a thing of beauty, but if the designer will invest a shilling in a box of *pastels*, he will have a range of very brilliant colours at his command. If he will use as background only dark or dull coloured paper, he will gain the full advantage of this brilliance. Pressure should be firm and steady, so as to fill the recesses of the paper with chalk at one stroke. A little practice also in very faint line-shading in one colour or a blend will demonstrate the possibilities of this medium in card work. So long as such cards are stored so as not to smudge, they will last long. A damp sponge, quickly applied, will often clean a used card ready for a fresh design.

## Stencilling.

Stencilling (Fig. 10) enforces simplicity of style—which is a great point in its favour. It is a means

Fig. 10

of rapid design multiplication—which is another. Straight lines or gradual curves characterize it. Briefly, holes are cut in a card so as to form lettering or a design, and colour is dabbed through the holes on to a show-card.

The art of stencil designing lies in so arranging the holes that the resultant design is graceful and natural, while the card is still strong and flat.

The cutting is tiring—hence the simplicity of the design. A "plate," once cut, will yield scores of prints before paint clogs its finer angles and spoils it. A special brush is needed, costing about 6d.

Splattering on colour, i.e. spraying it on by scraping the bristles of an old tooth-brush with a knife blade, is another method of getting colour through a stencil plate, and, used in conjunction with its sister method, it has pleasing results.

The quickest way to reproduce by stencil is to spray on colour through a barber's scent spray—so long as the colour is perfectly free from grains.

## The Subject.

Proportion and instrument, then, form your style. There is, however, a factor which controls these two—*the subject*, and the particular feature of the subject which you desire to accentuate. This consideration will determine what the proportions and what the instruments will be. Though mentioned last, it is first in the designer's mind when work is to be done.

## Colour Schemes.

When colour schemes are to be embarked upon, the designer must be equipped with a knowledge of the principles of colour. Briefly stated, they are as follows. There are three primary colours: red, yellow, blue. From these all other colours are made. Mixed in pairs, they produce secondaries. Red and yellow make tints of anything from orange to tomato, according to the proportion of the two ingredients. Red and blue, likewise, yield all the mauves and purples, and blue and yellow all the greens.

All the other shades you see are tertiaries—mixtures of all three primaries. Greys, browns, cream, and all the *duller* reds, blues, greens, and mauves are three-colour mixtures. Only the very brightest hues are single and two-colour tints.

This knowledge is a necessity when arranging the most effective colour contrasts. Really to appreciate it, the student must experiment with dabs of colour, on odd paper, actually making the discoveries of the various shades.

## Colour Contrasts.

Contrast is the feature which makes your cards noticeable. Apply colour knowledge to evolve colour contrasts. Here are some examples. Orange is red and yellow. What is missing? Blue. Then blue and orange are two good colours for, say, letters and background, on a ticket. Black and white make, of course, the greatest contrast, but colour is a greater attraction. On similar lines you find that red is absent from green (which is blue and yellow), so red and green contrast well. So does purple (red and blue) with yellow.

Seek those pairs of colours which have either nothing or little in common.

## Colour Methods.

Now as to colour methods.

Water-colour is paint mixed with water and applied with a brush. Buy ordinary artists' water colours in collapsible tubes. Colours in pans are useless for your work. To commence with, get five colours—red, say Crimson Lake,

yellow (Chrome No. 1), Prussian blue, Ivory black, and Chinese white. Quite small tubes are sold. The prices are not low, but only good paints give good results. When you can use these to make your own tints the following additions are useful, though not at all essential—Vermillion red, Chrome green, Vandyke brown, Ultramarine blue. The shopkeeper can show you another score of colours. Personally, the writer prefers to work with the five first named, occasionally utilizing vermillion and the brown.

In water-colour painting, the background is always white, or light, because the paint is transparent.

## Body Colour Work.

*Body colour work*—the method of greatest use to the card designer—is painting in a creamy mixture which, being opaque, may be applied to any background. Dark ground, with light lettering, is by the way, more legible than, and equally attractive as, dark letters on a light surface. To make body colour, Chinese white is stirred to creaminess with water and then the other pigments gradually stirred in. It is applied thickly with a fairly full brush. Should you wish to give your lettering a glossy appearance, add a little clear gum, or dissolved white sugar, to the paint. Do not overdo this, or the shine will dazzle the reader at certain angles of vision. Such cards become sticky in damp weather, which spells ruin when they are stored away in a pile for future use.

These two methods call for the use of the brush.

## Waterproof Inks.

Architects' waterproof inks are made in a wide range of brilliant colours, and may be applied with brush or pen. They are, of course, transparent, and need rapid use as they dry quickly, and, if work is slow, unevenly. They retain their colour well, however—except red, which is quick in fading. Ordinary coloured writing inks are extremely fleeting and are useless for anything but very temporary cards. Indian ink—a dense, waterproof black—is of great utility in pen work. It completely eclipses in effect the black writing ink sometimes seen in pen-printed cards. Its absolute black, on dead white, is telling and vivid, whereas writing ink is faint and dull.

## Pastels.

Pastels are very refined chalks. As before mentioned, they are far more brilliant than ordinary coloured chalks. Do not confuse them with crayons, which are greasy or waxy and quite useless for ticket-writing purposes.

## Gold and Silver Inks.

Many printed cards show the use of gold and silver printing inks. These may be bought for handwork, but their employment should not be extensive. They have the defect of dazzling. Moreover, being generally composed of finely powdered metals in a solution of quick-drying spirit gum, they are difficult to apply neatly. They foul the brush, clogging the base of the hairs, and so splaying them out that they will not form a point.

It is best to rely for success on effective design and pure water-colour.

## Materials Required.

Some guidance is needed as to the materials required for card producing.

The first essential is a smooth, hard, flat surface on which to fix the card while working. A drawing board, of suitable wood, made so that warping is impossible, is best. (Fig. 11.) It is portable, and its angle may be varied. Much, however, may

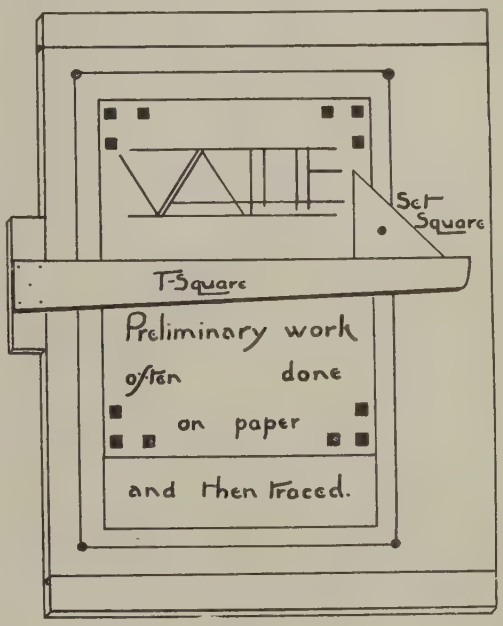


FIG. 11

be done on a table, or counter top in default thereof. Flat-headed drawing pins secure the work to it—they need only press the card with their rims, not actually piercing it.

A T-square, slid up and down the edge of the board, produces parallels for guides, and a set-square, sliding thereon, gives true uprights, or accurate slants, for the same purpose. French curves (Fig. 12) help in big designs and letters. An ordinary H.B. pencil—used lightly—is satisfactory for sketching in.

A compass (Fig. 12) is a great boon. Fitted

with two points it enables transference of measurements without constant reference to the rule. Fitted with a pencil, it greatly aids in design of circular or part circular letters or ornament. Fitted with a ruling pen, it finishes this ornament off with perfect curves, and that absolutely essential quality—a clean edge. It is a labour-saving device not to be omitted from your outfit.

The ruling pen needs some description. Two pointed blades whose distance of separation is

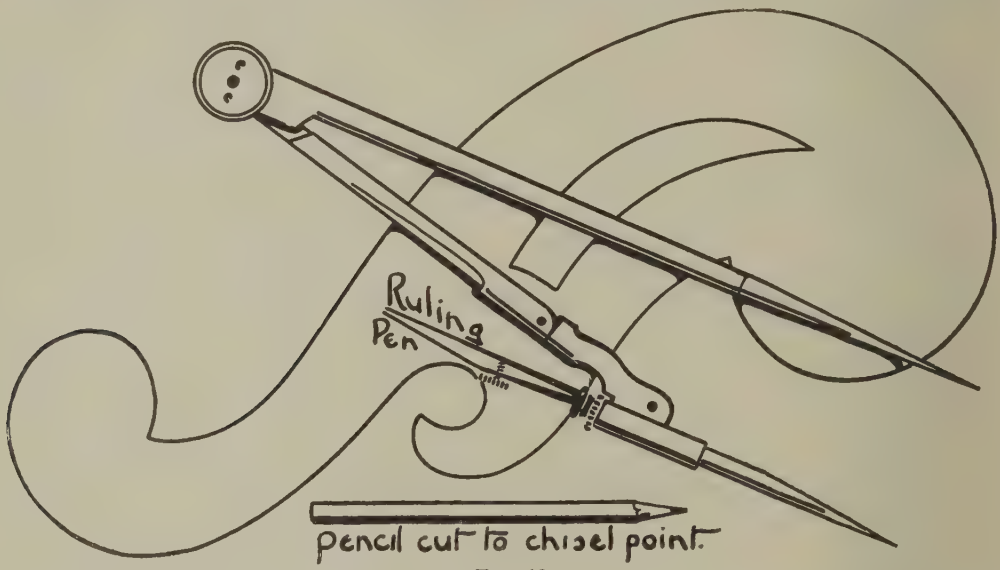


Fig. 12

governed by a screw, hold ink between them. Used edgeways, either in a compass or against a ruler or French curve, it leaves behind a line of thickness constant throughout and varied by the adjusting screw at desire. Do not dip it in the colour. Apply the ink between the blades a little way up from the point with a brush. It will flow down to the point itself.

The reed pen (Fig. 13*a*), as its name implies, is cut from a hard, hollow reed, like very thin bamboo. Treat it gently and trim it with a very sharp knife.

The best metal printing pen the writer has seen is made as illustrated (Fig. 13*b*), of springy metal. The upper leaf is split in several places to conduct ink to the working edge. Many widths are made, some designed for producing two strokes at once, as in shadowed printing.

Parcels pens (Figs. 13*c* and 13*d*) have one defect. They will not produce a very fine line when used edgeways. This detracts from grace of style.

## Brushes.

Brushes, to be good, are dear. If you can, get sables. Their bristles are very springy. They point well when moistened. Their cost, however, forces many designers to fall back upon fitch brushes, which, though lacking the resilience of sable, will, with care, turn out very satisfactory work.

The writer recommends four brushes—one small, one medium, and one large round (Fig. 13*e*), and one medium flat (Fig. 13*f*). The smallest and the flat may be dispensed with ,but are very handy.

All pens and brushes must be stored so that their tips are not in contact with anything. The consequences of pressure on a nib are obvious. If the bristles of a brush are forced over and left so for long, they remain bent and the brush is useless.

Fig. 13

When cleaning brushes—which should be done directly they are finished with—see that they do not rest on their points in water. Lay them on their sides in a saucer or suspend in a jar by pushing the pointed handle through a piece of card bridging the jar-top.

Methylated spirits, or else *immediate* warm water, and soap, will remove Indian ink from a brush.

But this ink is apt to spoil the "life" of brushes. If possible, keep a special brush for its use.

## Surface Required.

The best surface for work is very hard, smooth card—except for pastels, which need a granular surface.

Such hard card is very expensive. For this reason, suitably "faced" blank cards, cut to various sizes, are put up by the firms who print window tickets. Quite satisfactory results also are produced by pasting hard, white paper over old show-cards and afterwards trimming the edges.

All your cutting, whether of cards or for stencil plates, should result in perfectly clean-cut edges. To obtain them, work in the following way. Keep the knife—a pocket knife will do—constantly very sharp by rubbing it, after every few cuts, on a stone, or a strop of fine sandpaper stuck on a strip of wood. A "wire" edge to a knife rags the edge of a card, so take care in stropping. There is a tendency to slice strips from a wooden ruler. A steel one is an advantage in this direction. Press firmly and aim at cutting right through the card in one stroke. Cut on a hard surface to get best results. A piece of glass is best. See that it is flatly bedded or pressure will crack it. If ordinary soft wood is used, it is scored by the knife, which then crushes its way through the card instead of cutting it cleanly.

## Possibilities of Stencilling.

Space does not permit of a detailed account of the method of stencilling. Enough has been said to show that it has great possibilities. A simple pattern, such as is shown (Fig. 10) may be twisted and reversed, and partly masked and painted in more than one colour, and may so give a needed touch of ornament to an otherwise plain printed announcement.

If inks are used through a stencil plate, apply with a piece of sponge, *lightly* charged. Paint should be like thick cream, and is applied by vertical dabs of a round brush, whose bristles are arranged to make a flat end. (Fig. 13*g*.) If the bristles are too long on a new brush, bind them with tape till only about $\frac{1}{4}$ in. protrudes.

## Principles.

If you recall the conditions under which your work is to succeed, you may deduce therefrom the principles you must follow. Your cards must, generally, be striking—in order to draw the public eye upon them. They must also be attractive, that the eye, once drawn, remains. They must be extremely clear—that the eye may swiftly and without need for effort receive their messages. Hence the call for simplicity and the need for care in every detail of designing and carrying out the design of your cards.

Form the habit of criticizing the printing and colour schemes of posters. They are of a type meant for reproduction and not original display, but will yield many valuable lessons.

Be frequent in practice and ever critical of your own work. The more you criticize and correct, the less will others find to criticize in your productions.

## SECTION 24

# Buying Goods

By Albert E. Bull

### CHAPTER I

## THE BUYER AND THE FIRM'S PLAN OF CAMPAIGN

"Always sell your goods before you buy them," advised a merchant.

It seems an upside-down argument, but the meaning is right. "Find out what the market wants before you provide for it."

### Good Salesmen and Good Buyers.

It is not always necessary for a man to be a good salesman in order to be a good buyer. In fact, many excellent buyers are bad salesmen and *vice versa*, as the sets of qualities required for the two trades are mostly very different.

But the buyer must be able to gauge with more accuracy than the salesman what the market needs, what it is capable of absorbing, and the conditions, prices and quality under which business can be done.

To obtain this knowledge he must be aware of many important facts which can only be properly obtained by selling; and so, if he is not himself an actual salesman, he is dependent for much of his success upon the results of other people's experience in selling.

In a certain sense, the man who sells is the gatherer of information, and the man who buys the classifier and user of the knowledge gained.

It is not sufficient for the buyer to deal with cold facts, such as show up in the office, the warehouse, or the shop, in the results of active efforts, as seen in ledgers and stacks of goods. He must be able to get at causes behind the facts and use the knowledge that is the minds of the great buying public—knowledge that is acquired only in actual selling.

On this account, if he is not himself a salesman, he must keep very closely in touch with those who sell the goods. In those business concerns in which the rigid "department" idea triumphs over simpler and more human methods, one of the chief liabilities to disaster is the break between the two sides of business.

Increasingly among progressive firms are endeavours being made to keep buyers and sellers in the closest possible touch with each other.

But it is by no means necessary that buyers and sellers should possess the same qualities. A salesman can be rash and venturesome—a buyer must be cautious to his finger tips, and act on the sound advice in *Potash and Perlmutter:* "Never go 'No Trumps' unless you can see thirteen tricks in your own hand."

The salesman can "hope for the best." In fact, unless he hopes for the best all the time, he will be a poor salesman; but the buyer must "prepare for the worst." Optimism is the life-blood of a good traveller or counter assistant, but it is the short way to disaster with a buyer.

The buyer who suddenly feels gay and sparkling and full of the joy of spring, may be acting soundly enough to write out his orders in that mood; but he will be well advised to postpone posting them till the next day or till he has had a chance of looking through some of the stock that hasn't gone off very well.

It is not suggested here that the buyer must always be morose and cheerless, always a kill-joy and a censor. It is the equable spirit rather than the pessimistic he needs. One likes sparkle and hopefulness in every one, but the man at the wheel in a storm, or the driver of the "Flying Scotsman," must be permitted to be thoughtful and quiet on duty.

### Knowing the Firm's Policy.

The buyer does not always shape the policy of the firm; but he must know it, for he is the man upon whose actions may depend the carrying out of the policy.

It is important, of course, that the policy be realized by every worker, and, where there is good organization, everyone in the business either falls in with the requirements of the general plan or is the sufferer to the extent of his failure. Usually, this inability to understand or carry out is personal in its consequences and does not greatly disorganize the system as a whole.

But the buyer is the one man who can make havoc of a plan and reduce the best system to disorder.

A traveller who wants to sell what the firm doesn't stock, and who has his own notions of prices can quickly realize that there are mistakes that prejudice sales and theories that must be corrected forthwith, lest worse should happen.

The book-keeper with quaint theories of balancing books or a reluctance to make the books balance at all, can quickly be corrected by the auditor's sharp young man, or even by his own second in command.

The warehouse-man who packs the scales in with the currants and the foreman's hat with the jam, learns about his errors before a few days have passed.

But the buyer may work earnestly and with loyalty, and just because he is out of touch with

But trade is not thus swept under a definition. Simple as may be the idea that leads to success, nearly always the course that must be steered, to keep to the plan that has been selected, is an impossible one unless the definite policy is kept in mind.

Thus: a big business has been painfully and slowly built up in view of the demands of a large number of people for certain commodities of sound and reliable quality but at a distinctly reasonable price.

*Photo lent by* *"The Draper and Drapery Times"*

SECTION OF MAIN SHOWROOM
(Children's Outfitting Dept., Messrs. Sharp, Perrin & Co.)

the policy of the concern, he may bring a creeping paralysis into any trade.

"Policy" in a business has much to do with its success. Often the simpler the policy the greater the success. The men who have built up huge trading and manufacturing concerns have not always been men of complex methods, and the story of success in trading is frequently the story of a very simple idea carried out in the simplest and most direct manner.

But in making and retaining trade, continuity of purpose and method are essential; continuity in the visible parts and in the invisible.

It is easy enough for us to sum up all trading in a phrase or two such as: "No lasting success was ever built on poor quality"; or "Quality first and never mind the price"; or "Sell cheaply and the goods sell themselves."

A new buyer, with a leaning toward special high grades of quality, is appointed by the firm.

"This stuff we're making," he sneers. "Why, this is the sort of stuff that is sold out by the ton, Saturday evenings at market stalls. I must get a little more tone into this business."

Precisely. He has gauged the trade to a fraction. It is exactly the kind of stuff that is sold by the ton on Saturday evenings at the market, and that is why the firm is so busy making it. The new buyer sees visions of getting "the cream of the trade" in the best Italian warehousemen's shops, and being astute and cautious, works slowly toward that end.

What happens?

The market trade is just as slowly lost, because the prices must be slightly readjusted, and two

strong opponents get the chance they have been waiting years for.

But he gets the cream of the trade instead?

No. That isn't so easily obtained. The travellers haven't the entry—a new connection will take years to build.

"Besides!" says the high-class shopkeeper, quite politely, "though the present quality is certainly good, your people have a name for a rather different type of trade."

Or: "No. We've seen tons of your stuff at the cheap stalls and down side turnings. I'm afraid you must be content with the trade you've got. I often feel sorry I didn't go in for that more rough and tumble sort of business myself. But as we make the bed so we must lie in it."

And the traveller cannot explain that the old bed is no longer vacant and he is searching for another.

Then, again, the new buyer may diagnose the case in a slightly different way.

"We're paying far too much for our stuff. After all, there is no good blinking the fact: we haven't got the high-class business, and when it comes to stuff like ours, we must save money wherever we can in order to turn out the goods cheap enough."

So money is saved in buying.

Now in this case the policy of the firm has been simple. The men who first shaped it realized that there is a multitude of people who are forced to look at sixpence twice before it is spent; but they also realized that this same multitude, though it is not fantastic, has a sound sense of quality.

And so with careless buying this multitude is lost, the heavy Saturday market trade fades away as the quality becomes reduced. It is useless for the buyer to proclaim: "Thanks to my zeal we can sell goods at £2 a ton cheaper with the same profit to ourselves." The policy has been messed and the goods don't sell at all.

## Buying United to Other Work.

In this section it is convenient occasionally to speak of the buyer as a person apart, whose sole business is buying, just as a traveller's sole business is selling.

In actual fact, however, there are very few men and women in commerce who are simply buyers. In the vast majority of the trading concerns of this country, and indeed of every country in the world, the buyer is the owner or the responsible manager or director of the business, uniting this work with many other tasks that belong to management and control. Even in those concerns in which the term "buyer" is generally used as a description of an important man in a department, it frequently happens that the buyer is really the manager of the department, having ample powers of control inside the general laws and customs of the firm.

The buyer of the china and earthenware, for instance, in a department store, may have almost as absolute powers of control as a man in his own business. He may be allotted so much space and capital and expected to produce a profit in proportion. He may even be financially interested in the results of his own trading, drawing an income that is greatly influenced by the results of his trading.

It is probable that most of the readers of this book will be buyers only as part of business work, and herein will lie the difficulty of applying any points about character and temperament.

It is easy to suggest that the salesman must be daring and the buyer must be cautious, but when the same person is both buyer and seller, it may seem hard for him to divide himself into two personalities.

In actual experience, however, it need not be so. Every man has different sides to his character, and may have quite opposing qualities which he can call up and use at will.

The man who packs his case of samples and leaves his junior partner or chief assistant in charge, and who goes out on the road in the spirit of boyish independence and with the zeal of an adventure hunter, and who can return to his desk and become sedate and shrewd and careful, may seem to put a very great strain upon his nature. Nor need this be the miracle he must perform. The most that he needs to remember when he becomes the buyer is that enthusiasm for the moment must give place to caution.

"Sell quickly; Buy slowly," advised a trader. The advice is good.

## The Right Kind of Caution.

What is written above may seem to advocate a hesitating, vacillating spirit in a buyer.

Such is not meant. Caution can be swift and direct. The good buyer is frequently the man who knows his own mind, who has planned his course with such rigid accuracy that he knows precisely what he wants and how much he is prepared to give.

The advice "buy slowly" does not mean a wearying, dawdling process of slow calculations and comparisons; it rather means a carefully formed decision that in its large general application sweeps aside at once the offers that are out of its range and enables the mind to concentrate upon the special offers that really appeal.

CHAPTER II

# THE BUYER AND THE CAPITAL ACCOUNT

Buy with one eye on the banking account.

The buyer should not only know the policy of

the firm, but he should know its financial position and its powers of carrying out that policy.

## Capital.

In most trading nowadays, the factor that determines a great many operations is that of capital. Even wealthy corporations, with almost unlimited money at their call, do not ignore the important place that the availability or otherwise of capital occupies in carrying out their plans.

The scientific use of capital is a study in itself to the heads of firms. In nearly all cases the object aimed at is to keep to some even policy, so that the money involved in the business shall be earning profits all the time, and so that there shall not be spasmodic and irregular calls for fresh capital at unexpected intervals.

With the comparatively poor man, the need for even trade is more pressing. The trader whose resources of capital are employed to the full, and who must check each act, not by the desirability or otherwise of bringing in more money, but by the fact that there is no more capital to bring in, dares not run risks of upsetting the whole equipoise of his business by unsteady actions.

Usually, in the latter case, the man who interviews the banker and who concerns himself with the moral of the trading account and balance sheet, is also the buyer. It would be perilous were it not so. But there are cases of struggling firms where the buying is not done by the financial controller.

In these cases the buyer who does not keep himself well informed of the position of the firm may make some serious mistakes.

Every trader is attracted by prospect of profit, and the chief argument a salesman can put to him is : "It will pay you."

But in working for profit the rich firm and the poor firm can hardly act alike. One may be able to lock up capital in costly stock while the other cannot do so. One can consider giving generous terms of credit on a purely mathematical calculation of relative values of money held in the bank or on the books, while the other must face the fact, if we give credit to Jones we shan't have any money with which to trade with Brown and Smith and Robinson.

## The Buyer's Knowledge.

The buyer is the man who must see these facts clearest of all, for it is in its buying that the firm commits itself to the kind of trade it shall work.

If may be presented to him that furniture is the most profitable part of his business, and it is the part he is neglecting ; but furniture may involve heavy capital for stock and he must be able, from actual knowledge of the capital account and the bank book, to shape his own policy, cutting out relentlessly, if necessary, all the prospects of a heavy profit that would lock up the capital which is the life-blood of his running trade.

There are times, too, when the buyer has special opportunities that a wealthy firm may take, but a firm with small capital only dare to do so after careful thought. Special lots of goods offered at a low price for cash may be a sound investment for one firm, a dangerous speculation for another.

The man who is thoroughly aware of the state of the capital account and the current obligations of the firm is armed to meet such an opportunity. He can tell to what extent he will be acting wisely, or whether he must firmly turn a deaf ear to the seductive offer.

The buyer for a business liable to heavy season fluctuations has special need for knowledge of the balance sheet. In shaping the plan for a whole season, he must know how to arrange his purchases in order that his available capital shall not be unduly strained.

Where a firm is trading on capital that is only just sufficient for its purposes, buying is one of the principal parts of financing the business.

## Flow of Goods.

It takes a great deal of foresight and care to arrange that goods shall flow into the establishment in a manner bearing a proper relation to the outgoings.

If goods arrive in unneeded bulk at any one time it may involve heavier payments than can be met. On the other hand, a shortage of stock may cause a temporary breakdown of the whole business.

A buyer is often in the difficulty of having to steer a constant middle course between using too much upon one hand and running out of goods on the other, and in this way he occupies a key position in which action is affected by and has its effect upon the general arrangements of the concern.

A firm in the position of being able to get new capital if it should be required, and yet from reasons of policy desiring to continue with the amount at present used, may place a big strain upon its buyer.

"You will have to buy more carefully, Mr. Smith," said the proprietor of such a business, to his buyer. "Your stocks are too heavy ; please go from hand to mouth more."

But a little later he thought out what he had said and explained a little more fully.

"I ought to explain, Mr. Smith, that I have a money partner who will put more money into the concern if I can maintain the present turnover till Christmas without overdrawing at the bank. There is security to draw upon if we really need it, as you know ; but it is more important that we get permanent new capital than temporary advantage."

"I wish I had known that before," said the

buyer. "Now I see where we are. It will be a little difficult to do as you wish, but I see the object and can work to it."

There are men like this. They need to see the whole plan—at least in its broad outlines—to enable them to fit in with it and do their best work. The buyer is particularly the person who must be trusted with something more than a mere wish or statement. When he sees the *why* as they may seem. It is often important to think in fractions and decimal points, to calculate in sixteenths and thirty-seconds of a penny, but these acts can be performed quite as ably by a banker or a stockbroker as they can by a peddler or a huckster.

One might go farther than this and, generalizing from experience, might say that it is frequently the man with the very big mind who has the

*Photo lent by* *"The Draper and Drapery Times"*

SECTION OF UNDERCLOTHING DEPARTMENT
(Messrs. Rylands & Sons, Ltd.)

and *wherefore* of things he can act with a greater amount of certainty, and can become a more useful ally.

In the same way, the trader who is his own buyer and has his trading policy well in view all the time, can save himself many difficulties, especially when he is working between narrow limits.

## CHAPTER III

## THE LARGE-MINDED BUYER

THE generous-minded man is often a good buyer. Niggling, narrow ways are not really as economical finest grasp of detail and who will pursue the elusive farthing with the most relentless and untiring zeal.

Buying, as already suggested, is an act of discrimination better carried out in an equable and judicial spirit than in one that is merely liverish and carping.

A merchant, known as a very keen buyer, obtained a controlling interest in a business owned by a less fortunate neighbour. Until the business had got firmly on to its feet he displayed a rather meticulous interest at times in some of the details of management.

One day he had just signed a cheque when he happened to notice that the amount of the cheque

did not exactly agree with the net amount of the account.

"The account is Eighteen pounds, seven shillings and fourpence," he said. "But I see the cheque I have just signed is only Eighteen pounds, seven. There's a mistake somewhere, Mr. Thomson."

"We always knock off the odd pence on remitting," said the old proprietor.

The new partner politely objected.

"Don't do it any more, please," he said. "I don't like the method. Fight like grim fate when you are buying, but when you have bought, honour the deal down to the last farthing."

The good buyer has often this spirit. He will not go back from the spirit or even the letter of his bargain, and he indicates this feeling when he is buying the goods.

## A Wrong Method.

There is a certain method that was at one time greatly loved by buyers of the narrow and "shrewd" type. This was to take the salesman point by point and endeavour to defeat him as each point is arrived at. Each transaction is the opening of a running campaign where there are separate stages reached at which the deal is taken up again and again.

This is how a buyer described his method.

"First of all, when I have seen and approved the goods, I obtain the lowest net cash price for 5 ton lots.

"Then I order 2 cwt.

"Then I take three months' credit.

"Then I complain of the quality and get an allowance.

"Then begins the battle for a discount. If I can't get 10 per cent I fight desperately for 7½ or 5. I get something.

"Then I give a three months' Bill of Exchange."

All this seems very clever; to get three months' credit, a discount, and an allowance on a 2 cwt. parcel that was bought on a net cash quotation for five tons, looks like the act of a genius.

But it doesn't pay. It may be done once, but it is the niggardly and quibbling kind of method that hits back every time.

Some travellers were comparing notes together in a commercial room. Travellers do not often speak about their customers to each other, or "talk shop" at the hotel. But there are exceptions and some traders (though they may not know it) are regarded as appropriate public topics much as if they were politics or the weather. They are, as it were, ringed around, and the etiquette of the commercial room doesn't apply to them.

"How do you get on with Rigden?" was asked by one.

"I have to put a 'bit on' for *him*. He is so eager to get a 'bit off,'" said the second traveller, "that if I didn't allow a margin I should be a loser."

"I do the same," said the next man, "and he has to be a clever buyer to get as much 'off' as I get 'on.' The man doesn't know what value is. Men of that sort never do. As long as he can beat me down a bit he cares nothing about anything else."

"My prices are fixed," said another traveller, "and if ever I feel a joy in saying so, it is to Rigden."

Rigden was not simply a close buyer, who tried hard to buy at a low price. Such a man gains the sympathy of those who sell. He was a mean buyer, who sought to get an advantage over and above the bargain.

There is a great deal of difference between these two facts. It is businesslike to use all the knowledge and skill one possesses in making a bargain; but it is a foolish act to attempt to gain, by improper means, some advantage that the bargain does not include.

## Reputation.

A buyer is often liable to forget that reputation is as important on one side of a transaction as on the other. The man who would not care to buy from a firm that is known to be dishonest, or dubious in its trading methods, and who is equally anxious in his own acts when selling to others to maintain a high ideal of justice, can easily get in the way of regarding buying as the place where price and value come before every sentimental consideration.

But this is a mistake. It does not pay (to put it no higher than this) to be known as an unjust dealer, where one gives the cheque, and just only in those deals where one receives it.

When two men or two firms have dealings with each other, up to the extent of the transactions they are partners with each other, and have a mutual interest. If a transaction is of such a nature that one emerges with a damaged reputation in the eyes of the other, that deal has been a losing deal. Some time or other the loss will come home.

A traveller opened an account with an enterprising tradesman who, in the course of a very short time, had built up a prosperous trade. Prices were quoted and goods were bought.

"One moment," said the buyer, "I know your firm by reputation. It has a good name and that is why I have bought from you. You have quoted terms and prices to me that I know are fair, and you have met me in one or two cases where I was buying lower than you quoted. Tell me. In meeting me in this way, is the transaction still satisfactory to you?"

"Perfectly," said the traveller. "But why do you ask?"

"Because," said the buyer, "I do not want to

do business that does not satisfy my supplying houses, just the same as I do not want to do business that does not satisfy my customers. I wish you to feel, as we have begun to trade with each other, that you have an interest in my business. At no time do I want you to lose money so that I shall make it. Equally, if you have goods to offer at an advantage, I want you to feel sufficiently interested in my business to offer them to me."

It was a new aspect, and the traveller said so.

"Don't you see?" said the buyer. "Business is mutual or it is throat-cutting. It is service or it is war. I prefer to regard it as mutual in interest and profit, and as service both to those I buy from and to those I sell to."

That man succeeded, and no wonder!

Two of his statements are well worth recording as evidence of the right kind of generosity in buying—

"Get *all* your own profit, but stop when you begin to take the other man's."

"It pays to gain the goodwill of everyone you trade with."

## CHAPTER IV

## THE COURTEOUS BUYER

CIRCUMSTANCES alter cases.

Mr. Browning, a wholesale trader, who was both buyer and traveller for his firm, heard that Mr. Smithson, from whom he had bought many parcels of goods, had given up "the road" and joined a retail business as a partner.

"That should be another customer for me," said Browning to himself, for he remembered Smithson as a remarkably pleasant and wheedling salesman to whom he had given many orders.

He called on his new "prospect."

But he was received with coldness that seemed intentional. He had no idea that the one-time genial traveller could change into such a brusque and scornful buyer. The fact nettled him, for he had given a lot of business to the retailer in the past; and, careless of consequences, he boldly asked the meaning of the changed manner.

"You seem very different now you are a buyer, Mr. Smithson," he said.

"A buyer *has* to be different," said the ex-traveller. "One has to gush a bit when one is selling, but it doesn't do to look quite soft when one is a buyer."

"Besides," he added, "I suffered so much with that everlasting cringing when I was selling that now I find it a pleasure to get a bit of my own back."

Here was the whole case in a nut-shell. The man's politeness had never been genuine, it had been, as he called it, "cringing." (Fortunately, there isn't a great deal of this among successful salesmen, but there is a little.) When the time came when he had no longer any need to cringe, he could bluster and bully.

### The Authority of the Buyer.

To put the case quite frankly. The buyer is not at his best when he chiefly regards himself armed with authority. It may be easy for him to feel this, for he is sought after, courted, and deferred to. He can make men happy or miserable by his "Yes" or "No." He has powers which may make all the difference between success and failure to some hard-working and not very fortunate being, whose commercial fate hangs upon the extra turnover a single good account may make.

What wonder that here and there we meet a buyer who glories in his power, and uses it for his own satisfaction, as much as for anything else? Such a man establishes an idea of etiquette in his own mind that makes it difficult for a salesman of independent manner to meet him on the level.

Very rarely is this pinch-beck Napoleon of the buying office a permanent success in his line. The love of adulation and flattery is a passion that grows, and by and by distorts a man's sense of proportion.

A buyer of this type met a traveller whom he had not seen for many months.

"You haven't called on me lately," he said.

The traveller spoke with surprising sincerity.

"I have changed my views recently," he explained. "I have been led to see that flattering people is wrong, and as I knew I could do no business with you without flattery, I thought it better not to lose time by calling."

That is what happens to many of the unpleasant buyers. People stay away. There is so much competition nowadays that a buyer may think it does not matter that only a few salesmen call upon him. He thinks it likely that a half-a-dozen callers will keep him as closely in touch with the market as thirty could, and that he will get as good an average of prices and qualities out of a few salesmen as out of many.

Maybe it is so in many trades and where regular and unvarying lines are being followed, but the modern up-to-date buyer would probably view such a position as very unsatisfactory.

### The Human Element.

An unpleasant buyer is not so much boycotted as avoided. The two things are very different in spirit, but they work out very similarly in result.

The human element cannot be driven out of business, and it is the human element that punishes the unpleasant buyer.

Looked at simply, a traveller who has ten regular customers in a town, and time or opportunity when he has seen them to try to open

accounts with the other eight or ten possible buyers, sometime or other finds himself in the shop of the unpleasant man. The usual reception is given to him. The frown, the sneer, the scornful interjection, and the good man leaves.

Time after time he goes to the town, adding slowly to his connection or just retaining its average size. Always he looks in to see a few of those traders with whom he has not yet opened an account.

As often as not he must make it "worth while" to the travellers who do call, and become in a sense a tied house. Proportionate to his purchases, his trade does not bring him the same opportunities as his opponents obtain.

"Yes! He buys from me," said a traveller of such a customer, "but I wouldn't care if he stopped buying to-morrow."

And the traveller with the special line—the special clearance lot at a low price that every

*Photo lent by* *"The Draper and Drapery Times"*

SECTION OF LADIES' UNDERSKIRT SHOWROOM
(Messrs. Sharp, Perrin & Co.)

But when he comes near the shop of the unpleasant man he stops.

"No! Not in there! Life is cheerless enough. I am just going on to Bristol, and I don't want to approach a big city in a dejected spirit. I shan't call there this time."

This is not a boycott. It is an avoidance. Every traveller has quite enough opportunities for opening new accounts without visiting the unpleasant man.

That man may think he can afford to be thus avoided, but he cannot. He is really off the stream of business, missing chances all day long. He is the last to hear of a good thing that is going. trader in the town would like to have? It is not likely that the unpleasant man will get the first offer.

Politeness pays in buying.

## "Goodwill."

In these days when firms are spending huge sums of money on advertising, it is becoming increasingly recognized that a large part of this outlay must be regarded as purchase or establishment of "Goodwill." Some firms declare that this invisible asset has a higher money worth on the market than all the visible assets they possess, such as stock, plant, buildings, and ledger accounts.

"Burn down my factory to-morrow," declared a manufacturer, "let there be no insurance claim recoverable and not a brick left of value, wipe off my book debts as irrecoverable, and I have still an asset remaining that is more valuable by far than all that is destroyed—my Brand or Goodwill."

It is realized that in the establishment of a value of this kind, there must be concerted action in every part of the business. It does not do for the customer to be courted and the traveller insulted: it does not work for those who pay money to be given a different kind of treatment from those to whom money is paid.

"Goodwill" is a psychological value. It is built up inside the minds of the people, and like all those impressions and beliefs that form a public opinion, is subject to waves of thought that come from every quarter.

The judgment of the public is sound. It is formed from impressions that do not always lie upon the surface. Every firm, in its appeal to the great public or its own limited circle of buyers, is sooner or later discovered to be what it really is, and gains or loses thereby. The just-minded salesman at the front counter is a good advertisement—the carping, unjust, buyer in the back office is a bad one. He may think he is unknown and unseen, but the spirit of his acts is realized by all who deal with his house, and he damages Goodwill as quickly as it is established.

## CHAPTER V

## KNOWING ONE'S SUBJECT

"I SUPPOSE you are deeply interested in this question of railway rates," said an acquaintance to a buyer.

"Why?"

"It must make a great deal of difference to you."

"Not an atom. I never bother about such things. My work is one of those tasks where one can draw a pretty sharp line between the things one *must* know and the things one *needn't*. I never confuse myself by crossing that line.

"Most of the goods I buy," he went on, "I might say practically all of them, arrive at my place carriage paid. I buy subject to delivery at the door in practically all cases. I am aware that a firm in Bristol or Newcastle can send me goods by water, which a firm in Bradford or Birmingham cannot do, and I have a hazy impression that water carriage is cheaper than rail carriage. But when I am buying I don't let the fact influence me in the slightest degree.

"I am interested in price and quality. It is for the competing firms to show me which can deliver the best competing value carriage paid at my door."

This is one method. It is a good workable method, especially for a busy man. In trade, there is a clearly defined place where a trader can draw a sharp line and decide that one side demands his close attention and the other does not.

But some buyers contend that this attitude is wrong; that no such line should be drawn, and that every act involved in the production, manufacture, and carriage of goods is a subject for enquiry by the trader who buys them for further distribution.

The reason is two-fold. Trade, to be well done, needs to be linked up from end to end. The trader, to be a good specialist, must be aware of other acts in trade that lead up to and flow from his own.

### The Specialist.

It is essential, in medicine or surgery, for a specialist to have all-round knowledge of healing arts and general medical knowledge. It is useless for him to attempt to isolate the complaint with which he is dealing, from his patient's general health. No college of medicine would have put him in a position to practice as a specialist unless he had given evidence of all-round knowledge of his science.

It may not be as essential in commerce that the specialist shall be equally well informed. But it is an advantage to him if he can train himself to see outside the range of his own acts.

Chiefly this advantage is in the genesis of new ideas. Commerce is never stationary—its very life is in the constant application of slightly varied and slightly improved methods, and the man who draws too rigid a line around himself, his duties, and his knowledge is the man who is most likely to put himself out of the line of new ideas.

Then, again, it is being forced upon us by the development of the "Brand" through the powers of advertisement, to recognize the "lateral" movement in trade as opposed to the "horizontal." In the old days a trader would say, "I am a wholesaler," and as a wholesaler he bought in certain markets and sold in others. Another man was a "retailer." Another was a farmer and grew the material; another a "dresser" and prepared it for the market.

Now, a single firm will interest itself in every process of production, preparation, manufacture, sale, and delivery into the actual shops, or even to the ultimate retail buyer.

It is a tendency in trade, and the modern business man dare not ignore it.

The buyer who says, "I know nothing about the goods that are offered to me except price, quality, and suitability for my trade," is not fair to himself. He is cutting opportunities out of his business life.

Years ago there was a retail buyer in a small

seaside town who had a rather large outlook on business as a whole, and a curiosity about his goods that extended beyond his own premises.

All the goods that came to his shop were delivered carriage paid, by railway and carrier, and buying was easy, as it involved simple comparisons of prices and qualities. Much of the material he bought was brought by rail from the manufacturing town a little way down the coast.

In his case, a few enquiries about carriage and railway rates evolved an idea in his mind, and later, a consultation with the other traders of the town resulted in the joint purchase of a small steamboat to ply between the little town and the city down the coast.

Thus was begun what ultimately grew into a most useful and effective line of steamers presently serving several ports and opening up hitherto difficult or impossible districts.

The salesman who takes a broad view of his duties does not limit himself to existing markets. It is a natural extension of his work to study the way in which new markets are opened or discovered.

## The Broad Outlook.

In precisely the same way, the buyer minimizes the real scope of his work if he views it his duty to limit his sphere of enquiry to the actual existing trade. Upon him devolves the duty of discovering new sources of supply and better means of obtaining the goods already supplied.

To look upon trade in the broad: It would be a serious state of affairs if Lancashire as a whole had no future vision about the sources of supply of cotton.

For years there have been indications that the boll-weevil may at any time destroy the whole American crop, and a great British industry may be paralysed for want of its raw material.

In cotton, Lancashire buyers could quite easily work on the simple facts of the market. But many of them have interpreted their duties in a wider spirit, and are increasingly doing so. At the present moment a disaster to the American crop may cause an almost equal disaster in Lancashire, but as time goes on the broader sense of the buyers' duties will do much toward preventing entire dependence upon a single district.

The buyer is only a unit in the social and economic system. But he is a watchman who, in his peculiar position, has special advantages in being the eyes of the public. He is the man who can see when there is something wrong about the sources of supply, who can detect coming dangers and perils to trade.

He cannot do this if he lets the office be his horizon and the price quotation his sole source of information.

"You seem to dig into the history of these products," said a traveller to a trader, after he had heard some information about his own goods that was new to him.

"Ah! but don't you see?" explained the trader. "I am the news gatherer, as well as the buyer. I collect the goods for my salesmen to sell, but I must collect selling points as well, or they won't be able to sell them.

"There is cheese, for instance," he went on. "Last year I took my holidays in Holland and I investigated the history and manufacture of Dutch cheese on the spot. Dutch cheese is a romance in itself, if you have the right kind of spirit to appreciate it. I was able to give some points to our salesmen about cheese when I got back. The consequence is our trade in Dutch cheese has doubled."

"And English cheese has fallen off to balance?"

"No! It has increased in sympathy; we are selling more all round."

## Selling Points.

Traders nowadays are getting keen on "selling points." They realize that goods do not sell by being thrown at the market, that business does depend upon arguments that operate inside the mind of the ultimate purchaser.

The buyer is nearer to the source and history of an article than the salesman. He is not the one to *use* the selling point, but he is the right person to discover it. It is his business not merely to "feed" the salesman with material for sale, but with argument and knowledge that shall assist in the selling.

Hence, it is unwise of him to cut himself off so distinctly from the sources of information. There is a suggestive power in knowledge that should not be undervalued.

It is not suggested here that a buyer must know the origin and history of every article he purchases, nor need he neglect the obvious duties of the day in order to delve into obscure and trivial facts. The point is rather that in buying goods he can serve himself better the more he knows about them. If he rigidly declines to interest himself in any particular place he may lose some really useful knowledge. Though he is a business man and not a student, he should remember that a student will cheerfully learn a hundred facts for every ten that may be of actual direct value to him.

## Advantage of Knowledge.

Knowledge of the articles one buys gives an advantage in dealing with the salesman. It is easier then to get down to the bed-rock facts of comparative values and prices, and there is less need for dependence upon artifices and contrivances by which a salesman is, as it were, "jockeyed" into giving his best terms.

Transactions between traders tend to become simple, and there are few occasions nowadays

A Fine Central Hall
(Henry Lingard, The Bradford Drapery)

when a "pose" or an "attitude" has any value in a commercial transaction. But even in exceptional cases the man with sound knowledge of his subject is saved from the need to "manoeuvre for position" when he is buying. He carries his knowledge in his manner and the conversation commences with a statement of plain facts and prices.

"It is a strange thing to me," said a traveller, "that some men assume a most mysterious air of alertness and shrewdness when they are buying. The very accent of the voice is changed and a look comes into the face that is strained and unnatural. I can't make out why they do it. I think they regard buying as a mystic art that involves a wholly separate state of mind from any other, and that should be pursued in a quite un-human and fantastic way."

"Nearly always," he went on, "I find that buyers who adopt this method are usually rather ignorant of their business. The man who knows his trade doesn't seem to do it."

### The "Innocent" Attitude.

It may be noted, in connection with this, that some buyers like to assume an innocence that is child-like and bland. These are far more understandable people, and the pose is much more pardonable. There is wisdom in the attitude that makes it easy for the other man to speak fully and say all that he has to say, and an assumption of ingenuousness may have this effect.

Very often the judge who asks absurdly simple questions in court is regarded by the outsider as adopting a foolish and ridiculous pose. Probably those lawyers present who have had the longest experience of law courts would be the first to disagree with such a notion, for they realize that such apparent simplicity is often the best way of making a nervous or reluctant witness speak, or of bringing out a vital point in the case.

The buyer who assumes a similar attitude is probably influenced by the same intention. To act as if he knew more than the salesman can possibly tell him, is not a good way of learning what the salesman has to tell.

### Patience.

Many really skilful buyers pride themselves on the patience with which they will give a salesman a proper hearing. It may be suggested, however, that if the object is to give the completest opportunity to him to state his case, mere patience is not quite sufficient in itself.

There is a patience that is appalling—that chills and freezes. There is, on the other hand, a patience that assists a man to come to the point with speed and directness.

It may be irritating to a man whose knowledge of his subject is profound, and whose experience of trade is wide, to have to listen to arguments and contentions that he could shatter with a phrase, but the buyer who assumes a modest manner does not really lose time in doing so, for he thus creates an atmosphere in which the salesman is made to feel at ease and can be more swiftly led to the facts upon which information is desired.

## CHAPTER VI

## ACCESSIBILITY OF THE BUYER

"I STARTED business with the most amiable intention of seeing every traveller who called," said a merchant recently, "but I find it very easy to lapse from the intention. Thirty have called this morning, and buying is only part of my work."

This statement touches upon a serious problem. The trader has only so many hours in the day, and he cannot spread them out longer than Father Time permits. When a buyer has to deal with a large number of articles, most of which may come from different sources, he finds that salesmen are many, and their calls occupy a great deal of time.

Some men get over the difficulty by making themselves inaccessible. The buying office is as well guarded as the general's head-quarters in war time, and the man who gets through the outworks and entanglements well deserves to do business.

Others find that the appointment of certain stated days and hours, with quite easy access for the salesman who comes at the appointed time, a useful method.

Of the two, the latter is by far the better. In a large business where the buyer has other responsibilities, it constitutes an excellent method of economizing time, it enables the buyer to give undivided attention to the subject, and it offers a reasonable excuse for not devoting more time than is necessary to each salesman.

Accessibility is important. The man who is unapproachable is hardly fair to himself or to the men who call upon him.

"I am always to be seen," said a merchant. "No traveller calls at my office without a chance of telling me his best lines—that is, if he has patience to wait his turn."

### Wasting the Traveller's Time.

But with this question of accessibility is wrapped up another. It is absurd for a trader to give or seem to give continual encouragement to a hundred salesmen, allowing them constantly to call upon him, when there is no more business to give than ten of them can reasonably share.

The man who only buys enough starch or ink or satin in the whole course of a year to make

one respectable parcel for a single traveller, wastes time and strength unnecessarily by letting a dozen salesmen call every fortnight or month in the endeavour to get a share of his trade.

There are some buyers who scarcely act fairly in this respect. Large dealers in some classes of goods, they only need an occasional convenience parcel in others, in which line, whether they bought at top price in the dearest market or at the lowest cut in the cheapest, the difference on the total annual purchases would be fractional.

These men, because their other trade is heavy, get attention they do not need, and out of some mistaken sense of obligation to see everyone who calls, permit their own time and other people's to be taken up needlessly.

In this matter the frank course is best. "The business is too small to divide, and we are suited," as a definite statement, saves trouble. The buyer has not simply to say this. He does no harm to prove it if necessary—to take a little trouble to convince an eager salesman once for all that he is pursuing a will-o'-the-wisp, and that no business will come to him.

A change in the arrangements of a firm led to a new director becoming the buyer. Hitherto the task of seeing all the salesmen who called had been loyally and courteously carried out by a principal who found the work occupied most of his time. In three months the new director had got the task down to an hour or two daily.

Yet he did it with quite genial courtesy. Not one of the men who saw him felt hurt or offended. He found a large number of travellers had been calling regularly for years; some of them had picked up a crumb or two of business, and some were living in hopes. The previous buyer's cordial manner had been taken for encouragement.

Quite frankly the new director explained to each man in turn the utter hopelessness of his wish where it was hopeless, the chances against him where "chance" expressed the position, and the interval that should be left before the next call where it seemed likely business *might* result later.

But with all this he remained accessible. His purchases warranted many interviews during the week, and he endeavoured to see all who called, but, though courteous, he managed to convince any who came that he was a buyer who intended to buy the goods he needed to advantage, and not a man would who let men talk lengthily to him of goods he had no intention whatever of buying.

## Three Classes of Houses.

Recently, a traveller made his first call upon a well-known and highly successful tradesman.

"You wish to sell to me?" said the trader.

"I do!"

"Well. Before you open your case or quote prices, do you mind if I say a few words? It is my usual method."

The traveller assented, of course.

"Look here, Mr. Traveller," said the trader. "I am a very busy man and I try to see everyone who calls on me. I have my own ideas of trading, and whether they are good or bad ideas I have to take the consequences. I know the policy I am working on and the qualities and prices I have in mind. As soon as you have shown me your samples and quoted your prices, I shall know where you fit in with my scheme.

"You will fall under one of three heads. Yours will be a house I want to deal with, in which case I will give you an order so as to get may name on your books; or yours will be a house I *may* want to deal with, in which case I shall ask you to call again; or yours will be a house that on my present plan I do not want to deal with, in which case I shall ask you not to make another overture to me for at least twelve months, unless some very strong reason, such as a new heavily advertised line, justifies it. Do you agree to this?"

"With my goods and your knowledge of quality, I am not afraid to do so," said the traveller.

"You come in the second class," said the buyer when the goods had been shown. "I shall be glad to see you again. I can't promise business, but you are on lines that seem to suit my trade. Now, before you go, take a good look around my shop. It may help you as to the kind of quotations to bring next time."

There was the whole point. The traveller represented the kind of house that suited. The buyer knew it, but just on that journey the right stuff was not being carried. It might be that some little time might elapse before business could result, but the point was that the traveller's firm was likely to suit the buyer.

## The Problem.

The problem of the unnecessary caller is a difficulty that does not diminish as time goes on and trade customs become more mutual and genial. The feeling that every man has a "right to live," and that opportunity must be given to all, makes the position of the buyer somewhat difficult.

When a trader complains of the great number of callers whose importunities exhaust his time and nervous forces, it would probably be found on examination that a great many of these men are earnest and devoted in their work but labouring under an entire misapprehension that easily could be removed.

Some time ago the manager of a branch business in conversation with his principal, explaining how fully his time was occupied, happened to say: "Then travellers take such a lot of time. I frequently see ten or fifteen in the day."

"But why?" asked the principal. "You don't buy anything at the branch. We buy all the goods at the head office."

"It wouldn't do to let the travellers know that," declared the manager decisively. "One never knows what good line one may come upon."

Quite right, though presumably the firm's buyer was equally alert and knew the firm's policy better.

But the point of the story is that all those travellers were simply wasting valuable time endeavouring to do business where there was no chance of business being done. The manager had no power to buy, and in a word he could have said so.

Such a line of conduct is really cruel and blameworthy, and fortunately such cases are very rare.

## Enlightening the Salesman.

But a somewhat similar state of things on a smaller scale can easily exist in a business where the buyer has powers and transactions are heavy.

A paper traveller had called many times upon a buyer, and had done no business. At last, when he was particularly persistent, he was met with what was, to him, a surprising statement.

"We should never be able to do very much with you, even if we open an account, which itself is not likely. You see, our chairman is the chief owner of the Tomley Star Paper Company, and we are rather tied for anything but a small chance line."

This was not fair trading. A salesman who calls, a second time, at all events, is entitled to know that there is a special fact like this that makes a material difference in his prospects. It is futile and ridiculous for a buyer mentally to shield himself behind the argument: "I didn't ask him to call."

The fact is, everyone who hangs out a sign or publishes in any way his willingness to do trade, invites both sellers and buyers to call on him by that very act; trade in any other understanding is unthinkable. A sign-board, a name above a door, is a challenge that any salesman has a right to accept.

More than that: a trader, working on certain lines, may reasonably be presumed to be in the market for goods of certain grades and qualities. He lives by claiming rights to trade that usage gives him; it is his duty to be loyal to other traders and to observe the spirit of their rights to trade also.

The man whose whole commercial attitude and appearance might reasonably lead to conclusions being formed that induce other traders to devote valuable time to the endeavour to sell him goods, need not disclose all his business to such men; but it is a clear duty to remove a false impression in special cases, where that impression is the result of his acts.

The firm that might reasonably be supposed to be buyers of £500 worth of paper during the year in the open market, but is practically a tied house for £480 worth of it, has no right to permit, say, a dozen paper travellers to continue calling without disclosing the fact. One or two of those men may want the odd fraction of trade that is left, but the whole of them are working on a false understanding.

Now a firm may be almost a tied house in another way, and have no need specially to point it out.

For instance, Brown & Co. have bought their paper from Smith & Co. for twenty years, and, all things being equal, will buy from them for another twenty. Salesmen are out to deal with this kind of problem, and it falls into the day's work with them. This is quite a different case from where there is a financial relationship between two firms that makes them almost one. In this latter case, however, the difficulty in the way of the new caller is usually stated.

This point is dealt with at some length because it is noteworthy that many of the buyers who complain with the most insistence upon the loss of time that salesmen cause them, are those who are not justified by the quantity of goods they buy, in taking up so much time and attention from salesmen.

## An Experiment.

Here is an interesting experiment for buyers.

Classify goods under three or four headings, giving the total money value of the last year's purchases in each case.

Jot down for three months the number of callers interviewed with reference to goods under the different headings, and the length of time devoted to each.

The result may be surprising. It will almost certainly be found that the section with the smallest turnover will have the largest number of hours and minutes to its debit. In many trades this would be unavoidable, of course. The wholesale confectioner who buys 10 tons of sugar in a minute and ponders carefully over some fancy Christmas goods before buying a £3 parcel, can hardly help himself.

But, in many cases, it is, if not avoidable, at least a useful argument. "The trade in that line isn't worth dividing," becomes not a saying but a policy.

# CHAPTER VII

# THE PROBLEM OF THE STOCK

EVEN where the buyer is not responsible for keeping stock, he is influenced in all his operations by its requirements. Sometimes he is in the difficult middle place between too opposing

interests. Capital considerations on one hand demand that he shall buy from hand to mouth, and only as goods are required, while the needs of the selling department may seem to be best met by lavish stock.

Only by experience can a man arrive at a just and proper average that will meet the case on both sides.

Very rarely do the running goods in everyday use constitute a great difficulty. It is comparatively easy to arrange that these shall arrive in a constant stream, and it is here that a buyer has the best chance of arranging that, proportionate to turnover, the charge of stock against capital account shall be relatively small.

The liability to over-stock or to run short is nearly always in the goods where variety in large turnover is individually small and sales are irregular.

One of the easiest mistakes a buyer can make is to pursue his theory of good buying too far, and to aim too eagerly at gaining the last farthing of profit.

## Two Kinds of Stock.

It is convenient to regard stock as consisting of two parts—

1. Running lines that represent the bulk of the trade and constitute the stock required for the chief business of the firm.

2. Exceptional or occasional stock or goods of low value, kept chiefly for the convenience of customers or for occasional purposes in trade.

It is in the first of these that the buyer should display his knowledge of values, his capacity for saving discounts, and his general enterprise.

In the second list, he should not so much seek for profit as for convenience. It is here that he should be content to lose his discounts if needs be, and buy at second-hand. These lines do not constitute the profitable business of the firm; they are kept simply because they help other business and would probably be unprofitable but for their effect upon trade as a whole.

To take a concrete example.

Merson & Watt are family grocers doing a good local trade and buying direct from supplying houses. They stock a good variety of running lines, the demand for which they are able to gauge with some degree of accuracy.

As their trade is large, they have many customers of varying tastes and a few of these ask for exceptional articles, which it is wise, in view of each account as a whole, to keep in stock.

There is, for instance, Grinding's "Gossamer Wheat Chips." Two or three buyers ask for these, each taking a packet once in a week or two.

The buyer can get the best discount direct from Grindings, Ltd., by buying a £10 parcel at 6¼ per cent net cash, or he can buy a dozen packages as he wants them from Shaw, Chesterton, & Bennett, the local wholesale grocers, at list price without discount.

Now, 6¼ per cent is not the kind of discount a keen buyer cares to lose. But a £10 parcel is possibly one or two years' stock.

Obviously, he had better lose the discount and buy locally, for behind all questions as to the length the stock would be kept, estimated on present turnover, is the chance that before half is sold, two of the customers for the article may change their minds and the third may move away.

The buyer is related to the stock and the methods of keeping stock. It is highly probable, if he buys a year's stock of any article, that, in warehouse space, oversight, care in handling (to say nothing of interest on money), that article will cost him a good part of the 6¼ per cent on its purchase price.

"What we traders want," said a retailer to some fellow members of his trade, "is a joint store, so that we can have only one stock of all the exceptional things and the odds and ends."

"But we have it," said another. "Any wholesale firm is a joint store, and provided it works its business on economical lines, it is the cheapest store, not only for odds and ends but for many running kinds as well."

This incident is not related to contribute an argument in favour of buying from local wholesale houses instead of from the manufacturing and direct-import houses, but rather to indicate that, for the retailer, the *bona-fide* wholesale distributor does really fill a useful place in the economy of trade.

A generation or so ago, the changes in trading brought about by the growth of multiple shops, co-operative societies, and departmental stores, appeared to threaten the local wholesale houses throughout the land; but when the tide had passed, "the local store" began to come into its own again. It was not an unneeded middle profit-catching imposition—it was found to be a useful and convenient collecting and distributing depot of great assistance to the scores of retailers.

The buyer who divides his goods into two denominations—"Trading Lines" and "Convenience Lines"—goes a long way toward solving a vexing problem.

There is, however, a place where, in ordinary trading transactions, it is proper to draw a line between simple business and meticulous trifling. A firm turning over £50,000 a year in twenty kinds of goods, but obliged to stock another fifty or sixty lines in order to oblige customers and to obtain the trade, and in those lines only selling a few hundred pounds' worth altogether, is well advised to trouble little about prices and profits on these small purchases, but put convenience and ease of handling before such considerations.

### Emergency Buying.

The buyer of a London export house, with some very energetic agents abroad, recently compiled a useful index.

Every article that the firm exported, or was likely to export, was on that index. It was not a list of the best prices and terms—the buyer had but as likely to have them in stock for their own purposes).

The incident is noted here in relation to one part of a buyer's duty: to be able to get stock at the shortest notice from somewhere.

In business, no one transaction can be quite cut off and isolated from the general trade, and

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A Confectioner's Shop Front

another method of calculating these; it was for use entirely in case of urgent need.

The theory of the buyer was that the reputation of the house was wrapped up in its treatment of the exceptional article. An order for twenty lines of goods from South Africa might contain one article not frequently asked for by such firms. That, above all, must be obtained and sent with promptness.

"Whatever happens, the unusual article must go by the first boat," was his motto.

Hence his list. It included retailers and manufacturers (not entered as sellers of articles named, there is wisdom in not making too rigid a rule that every deal must show its own profit.

"I have bought at retail price and sold at wholesale before now," said a trader. "It may seem ridiculous to do such a thing. But it is often the best way and the cheapest in the long run."

## CHAPTER VIII

## RISING AND FALLING MARKETS

"This is a heavy invoice," said a merchant to his buyer.

"Yes!" explained the other, "the market is rising and will continue to do so. I have bought two more lots like that for future delivery. We mustn't neglect a chance to make a bit."

The first speaker was not pleased.

"Look here," he said, "let us know where we are. This is a City office, not a branch of Monte Carlo! I am a trader, not a gambler!"

"On a rising market . . ." began the buyer; but he was not allowed to conclude.

"Please have a ledger account opened," said the merchant and debit the extra stock you have bought to it, and as we use the goods credit at the current market price. If there is a loss at the end of three months wipe it off to Bad Debts Account. If there is a profit send it to the hospitals. I am a trader—not a gambler."

## Speculative Buying.

A question is involved that, sooner or later, comes to every buyer. It is frequently brought to him by salesmen as an argument for buying.

Should the buyer be influenced in the amount of his purchases by the probabilities of falls or rises?

The simple business answer is "No." In theory, rises and falls over a period tend to balance each other, and where purchases bear a fixed relation to turnover, the buyer is saved the anxiety and risks that belong to speculation.

There are many business men who make a rigid rule upon this subject, and who will not increase or diminish the size of a regular order by the slightest fraction, no matter how the market may be tending. Their profit is derived from the customary sources, and they will not confuse themselves by letting speculative points affect their actions.

This method is to be commended. It is the soundest line for the business man.

## Facts to be Recognized.

There are, however, certain broad facts that a buyer must recognize and that should influence his methods; facts which, though they seem to belong to the speculative market rather than to the commercial, do certainly have their bearing upon the most conservative kinds of trading.

We have passed through a period of war and its aftermath, during which prices of nearly all commodities changed enormously. Putting slight variations on one side, it would be a reasonable summary to say that, during the war, prices rose and afterwards they fell.

A buyer in almost any line of trade during those two periods could assume, without being in the slightest degree a speculator, that the upward tendency would continue till peace was declared, and afterwards he could build upon the fact that, in the main, prices would fall. He would be almost ignorant of his duty if he failed to buy all he could expect his business to assimilate in one case, or to stock an unnecessary fraction in the other.

Where a buyer is able to walk around his stock rooms and find 20 to 50 per cent of his stock has fallen in price since the goods were purchased, he may hold all kinds of theories about the bottom of the dip being reached, and believe with all his heart that there will be a reaction, but he cannot ignore the general broad moral: That, till normal conditions again prevail, the heavier the stock the greater will be the loss.

There is no gambling or speculation in such an assumption. The solidly conducted firm that always held two months' stock in the old pre-war days would be madly worshipping a fetish to continue doing so, if they could manage with one month's stock, during the years following the Armistice.

The non-speculative buyer is right when he declines to let "the tendency of prices" affect his buying. But when he has the clear-cut history of months behind him, there is no speculation about the moral.

The published trading accounts of some great firms during 1921 and 1922 indicated clearly enough how capital can be cut into by the falling prices of stock, even where the utmost care has been used. Fortunately, many traders acted promptly as soon as they saw the trend, and cut their losses.

## Competitive View-point.

A buyer, without being at all speculative, is sometimes obliged to consider the effect, from a competitive point of view, of a sudden rise in prices.

Thus, a grocer in a large provincial town is aware that, owing to the increase in the price of flour (we presume the times are normal), biscuit manufacturers are likely to raise their prices. The travellers for the different firms are booking heavy orders for later delivery, and urge him to buy ahead.

The buyer's problem in this case is that his competitors will almost certainly give the advantage of their astuteness to their customers, and that if he persists in his usual policy and buys for ordinary requirements and as he needs the stock, he will be forced, for months to come, to raise his prices above those of his competitors or sell at a loss.

In such a case as this, he has two sets of wholesale prices to go upon. He knows that flour has risen, and he knows that the manufacturers must speedily follow suit. It seems not speculation but sound sense to buy a good stock in such a case.

Yet there are many traders who, even here, would sooner face an almost certain loss, than vary a sound rule of trading.

## Other Cases.

There are other cases in which the question of speculation is involved, and where the buyer, in viewing future tendencies of price, must shape his actions.

In a certain sense, all business is speculative, and every man who trades gives hostages to fortune. But there are acts in commerce in which a buying transaction is of such a broad nature that it involves some of the larger risks and some of the larger possibilities of profit that belong to business viewed as a whole.

Thus, the proprietors of an important daily newspaper, expecting to use paper in large quantities with regularity, may find that it is better policy to make a firm contract that binds them months ahead, than to buy at intervals to meet requirements.

In this action, up to a point, they become partners in a deal. The possession of their contract may enable the paper firm to manufacture more cheaply and make better arrangements for its whole trade.

Such a contract should not be viewed in the same way as a grocer buying 2 tons of rice when he thinks the market is rising, and 2 cwt. when he believes it will fall, for though there is uncertainty in both deals, and equally the market may favour or go against each transaction, the underlying spirit is different. In one case there is a business arrangement similar to a partnership ; in the other there is a method involved that finds its natural extension or counterpart on the racecourse.

## Speculation *versus* Enterprise.

Gambling on chances is not to be confused with boldness in enterprise.

There are many trades where a trader must take risks, and in which no business can be done unless there is an element of venture on the trader's part.

A draper, for instance, cannot proceed on the same lines as a grocer. In one case a whole season's stock may be rendered almost valueless by weather or fashion ; in the other it is a safe summary to say : "What doesn't sell one month will sell another."

This difference works out in the larger margin the season trader has to work upon. Were the drapers of the country obliged to sell their stocks at the same margin of profit as suffices a grocer, they would close their doors or offer the same fashions year in and year out.

The man who must buy all the goods for a season months ahead, requires experience and judgment, and must avoid being temperamental.

Good memory is of great value ; but even the best of memories should be assisted with as much data as possible. The actual results of purchases in corresponding seasons of past years are valuable subjects for study. It is surprising how the mind may store up memories in a quite disproportionate manner that can only be corrected by actual facts.

## Summaries of Results.

The season buyer, in view of this tendency, can help his future operations by making summaries of results from time to time, and especially at the end of each season.

Thus, for instance, the buyer of the mantles department, having come to the end of a season and marked down the remainder for the clearance sale would be at a convenient place for such an act ; he would be at just the right time to make an analysis of the season's trade.

It need not be lengthy. A page or two of a note-book would contain the needful facts.

These would give such information as to the lines which had sold out first, those that had sold badly, the proportion that had been marked down for sale, and such morals as could be drawn from the inclination of the public to keep to a few standard models or fly to extremes in taste.

The special bearing of climate, weather, and unexpected events, such as sudden national mourning, should be particularly noted.

In buying for a season, to refresh one's mind by glancing through three or four such summaries of previous seasons should be of the greatest value.

In work of this kind the man who can make average experience triumph over the exceptional incident is at an advantage, and this is a very difficult thing to do.

For instance, where one particular season has been exceedingly unfortunate, whether through miscalculation or an outside cause such as the weather, it is natural that the net effect left on the mind will be opposed to undue eagerness, and when the next corresponding season is approached caution will enter into all one's acts. But caution can easily become timidity, and the timid buyer is sorely handicapped.

In the same way, the man who has just passed through a booming season, in which he has found it hard to keep his stocks renewed, and in which a little more boldness in buying at the start would have paid him well, is easily tempted to proceed on lines that are more optimistic than sound.

It is in such cases that experience can check the wave of enthusiasm on one hand and timidity on the other, by holding the buyer down to the simple lesson of averages.

Past experience must, however, be regarded in the light of other tendencies. The buyer in a business that is constantly expanding, or that has begun to gain great advantage from successful advertising, may let the past bind him too closely. It is probable, of course, that he has a healthy corrective on the financial side. The department that was allowed to spend £4,000 last year and

that is granted £6,000 this year, is assisted by the ordinary workings of a rule of three sum.

### The Buyer and the Signs of the Times.

Without allowing himself to be influenced by moods, the buyer should none the less have an understanding of events and sentiment among the general public, that have their bearing upon likely sales.

It may not be hard, even in the middle of a "boom," to realize what must happen during a "slump." This does not constitute one of the greatest problems for the buyer in the season trade, for, given any reasonable data as to the degree in which trade will change, he can fit his stock accordingly. When money is short, people may still buy, but they will buy goods of a different character. They will look for durability instead of fashion, substance instead of appearance.

The real difficulty comes in, in judging when such a change will take place and providing against it.

In consequence, the man in charge of a season department must be in touch with outside events. He need not be a judge whose opinion is infallible, but he should be at least as wise as his fellows.

In all those social and national changes that have their bearing upon the trade of the nation, coming events usually cast some shadow before, and the buyer rarely goes very far adrift if he knows what "the man in the street" knows, and acts upon it.

It is, consequently, useful to such a buyer to be a reader of newspapers, and to mix with his fellows. There have been some great changes in trade during recent years. It is noticeable that those who have kept most closely in touch with ordinary passing events have been found at best advantage in their business arrangements.

A season buyer dare not be a recluse.

## CHAPTER IX

## SOLE BUYING RIGHTS

"I WILL buy this line. But, remember, no one else must have it."

In some trades this sentence is familiar. A Yorkshire or Lancashire mill-owner sending out samples of his new season's goods, often lays himself out for this kind of trading. The largest wholesale buyer is interviewed first and has his choice from the widest and most complete set of samples, and the lines he selects are removed from the samples before they are shown to the next man on the list.

In this way, the great wholesale firms are able to guarantee that the articles their travellers offer are unique and cannot be obtained elsewhere, unless in some rare and exceptional case by coincidence two mill-owners produce an identical line.

The desire to have special lines that cannot be obtained elsewhere is natural, and part of our trading methods. It is not limited to special patterns, but in varying ways runs through all the ramifications of commerce.

### A Commission Traveller.

A commission traveller, for instance (who is a buyer in this relation), likes to have the *sole* agency for the goods he sells over his district.

"We have never been able to get good commission men in the provinces for our brand," said the manufacturer of a well-known commodity.

"And never will," said a friend who knew the methods of the firm. "You are unable to trade with the really first-class men. Not one of them will take trouble with your goods."

"Why not?"

"Because you supply any provincial buyer through the London drysalters and wholesale firms. A provincial commission traveller will not take trouble to build up a business that a score of opponents can share when it is built."

### Sole Purchasing Power.

What holds good here, also applies in those cases where a sole purchasing power is sought by one firm from another. Such an agreement requires freedom to contract on both sides, and generally, besides any verbal or written agreement, must be observed in spirit to be of use.

Where a buyer is able to obtain a promise from the maker of a cloth that that pattern shall be kept absolutely to him, the sole remaining questions to be settled are those relating to quantities and terms. Probably both parties to such a deal would know that special privilege on one side must be matched by special consideration on the other.

### Different Districts.

But where sole buying arrangements are made for different districts, difficulties sometimes occur. Here is a practical case, given as an instance of what a buyer may sometimes have to meet.

A manufacturing firm, whom we will call Double and Tripett, employing several travellers gave all of them powers to make such arrangements, and did not lay down any hard and fast rule as to the way the ground should be worked.

One man covered Somerset, Wiltshire, Dorset, and the South-West. Another took Bristol and South Wales.

The Somerset man selected one good buyer in each town and limited his trade entirely to him, undertaking that no one else in the town should have the goods, under promise of special window

displays and bold declarations prominently displayed in the shop such as : " The only agent for Double and Tripett in the town."

The Bristol and South Wales traveller would not limit his activities in the same way. He sold Double and Tripett's goods, wherever people would buy, to wholesalers or retailers.

a district may be liable to this kind of thing without being able to avoid it. Very often the utmost he can really secure is a promise that none of the goods thus offered to him shall be sent direct from the warehouse of the contracting firm to any one else in his district.

There are so many ways in which goods get on

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A Fine Millinery Showroom

Presently, one or two wholesale Bristol firms which had already opened accounts and were already doing some business with the firm, began to get orders from the towns in Somerset and Wiltshire where sole agencies had been given.

At once there was disorder and confusion, and the man who had opened accounts on the understanding that they would be the only people supplied, felt aggrieved. It was a difficulty that had not been foreseen.

The buyer who desires to be the sole buyer for the market, and it is so easy for the man with money in his hands to secure what is somewhere being offered for sale, that, in the case of recognizable goods of large sale, it is almost impossible to guarantee that no one else shall be able to obtain them.

Difficulty was recently experienced in this way by a manufacturer who appointed exclusive buying agents throughout the country. A large firm of multiple shop proprietors opened an account. In this case the goods were sent to the head

warehouse in London, the manufacturer having expressly stipulated that he could not send goods to the provinces as this would interfere with his sole agents in many towns. But this did not prevent the goods from being distributed to the branches from the head warehouse, and considerable difficulty resulted.

### Unreasonable Requests.

It sometimes happens that a trader, in trying to secure the sole buying agency for an article, asks what is unreasonable.

"If you will keep this line to me," said a trader, when samples and prices were being compared, "I will buy at least a ton of it a month. But, remember, no one else in the district must get it."

"And other lines?" asked the traveller.

"You have nothing else that suits me."

But the offer was declined. The ground was being opened, and it was a first journey; but the line was the best lever he had for securing trade. He had no objection to letting any one buy this special article alone as it was not cut below cost; but it was a lever to get trade, and to accept this double limitation of restricting himself to one buyer, and that buyer restricting his purchases to the one line, made the whole proposition impossible. If a hundred new buyers in the district had bought that line and nothing else, it would not have been objected to, for almost certainly on a second or third journey some of them would try other kinds as well, but to give the option to one man only, and be barred out of other opportunities, was unwise.

### A Partnership.

The basis of this sole buying is not entirely different from the basis of partnership. It means that in a certain definite proposition two firms pool their interests. There are probably advantages on both sides when this is done—but there are also responsibilities.

"Give me the sole buying rights for the town," said a buyer.

"Very well," said the firm.

The first month's cheque was for £50. The second was £45. Six months later it was £30. A year later it was £15.

"We can't keep to you only," said the firm.

"Oh! but you gave me the sole buying agency."

"Yes! to be worked, not to be played about with. Over at Derby, a town the same size as this, we are taking £200 a month and are not tied to any one."

Could the firm be blamed?

Yet, in cases like this, the sole agent may feel very aggrieved at being dropped, and complain later: "I introduced the goods at great trouble and now any one can stock them."

### The Distant Firm.

Sometimes a buyer (and this refers more particularly to wholesale men), in his natural desire to have an exclusive article to offer to his customers, will search out a distant firm that has never traded over the ground, and come to an arrangement to act as buying agent for the ground.

Often when such a thing is done, the firm that is selected is chosen because of some points favourable to business. It may be, for instance, that the buyer resides in a port and there is a direct line of steamers plying between his town and the headquarters of the selected firm, so that, though the distance is great, the carriage charges are low.

But some buyers enter into an arrangement of this kind without due regard to possible consequences.

Here is an illustrative case.

A buyer made an arrangement for the sole purchasing agency for his town and district, with a manufacturer in a large northern city. Trading in this case had the advantage of a low carriage rate by water.

The city from which he bought the goods had four factories in the special line, all competing for business. The house he chose was the smallest and least enterprising of the four.

The venture had rather surprising success. His account became heavy, and the weekly consignment of goods grew in bulk.

In commerce, facts of this kind get around. Three eager and enterprising manufacturers soon became aware that there was a little corner of England in which they had never traded, where a single customer's business was quite the best trade their smallest opponent did.

"This requires investigation," they decided.

One sent down a special traveller. One appointed a local agent. The third opened a local depot. They were all somewhat disappointed by the results, but the local man who had brought this "hornets' nest" about his ears, was even more disappointed than they.

## CHAPTER X

## THE BUYER'S CORRESPONDENCE AND OFFICE WORK

A BUYER need not be a voluminous letter writer. People, as a rule, are pleased to get communications from him, no matter how abruptly they may be worded.

But the buyer is part of the firm and must uphold its traditions. Brevity can be polite and brevity can be dignified.

Some time ago a wealthy lady, who was a very

loyal customer of a large firm of drapers, became interested in the case of a neighbour whose suddenly reduced circumstances necessitated her earning a little money.

The idea came to her mind that the drapery firm, to whom she had paid many large sums of money and who had supplied her with most of her drapery and furniture, might be able to assist her poor friend, if not by giving orders, at least by giving advice.

Her friend was a clever needle-woman, excelling in delicate lace and embroidery. She obtained a specimen or two and sent them to the firm.

Like other samples, they were passed on to the buyer in the right department.

Now this buyer happened to be one of that unpleasant type that buys "snappishly"—the kind that sneers and derides. Worse than this, he had a pen that seemed dipped in vitriol, and, when specially displeased, a tendency to let himself go.

So the good Lady Bountiful, for her kindly work, received upon the drapery firm's printed and headed paper, a letter such as she had never received before. It did not merely decline the offer—it hurled it back with scoffing and contumely. The buyer had been rather "liverish" through the day, and the little bits of lace and embroidery had "raised Cain" in his bosom. That, of all times, was the occasion when his usually shrewish letters were excelled.

In consequence, the drapery firm lost its most valued customer and (the good lady couldn't help it, she was a bit of a chatterbox and a social favourite) the letter was passed around.

A buyer cannot ignore his relation to that invisible asset which we usually speak of as "Goodwill." It is scarcely politic to leave all the work of reputation to the selling end of a business.

The subject has been referred to in the earlier part of this section in its relation to person, manner, and the courtesy a buyer should display when he meets a salesman.

## Courteous Letters.

But it is even more important that a buyer's correspondence be courteous, for a letter may get into hands never intended, and may seem even ruder than it actually is to those who do not see its context.

Worse than this, a rude letter in the hands of an unscrupulous rival may be shown far and wide, and be very damaging.

## Informative Letters.

A buyer who is being constantly called upon by a large number of salesmen, all of whom know something of his standing and the kind of trade he is catering for, may easily forget that a letter to a firm, especially a firm with whom business has not been done, may be read by one who is not so well informed.

Often the headed note-paper of a buying firm is a good assistance to supplying houses in such a case, but there are buyers who will write for a quotation on a plain post card in a careless scribble and then be surprised at the result.

A wholesale trader, for instance, in a very heavy way of business, sending such a note may be presumed to be a small retail shopkeeper, and in reply he may be advised to buy from a fellow wholesale dealer.

In writing to firms with whom there have been no previous transactions, and to whom one may be a stranger, it is not sufficient to ask for a bare quotation.

Methods of trade are many and various, and some houses are unable to quote with accuracy unless they know with whom they are doing. The buyer of ton lots may receive a quotation suitable for the buyer of a hundredweight parcel.

Correspondence involves upon the buyer the necessity of giving a certain amount of information that is unnecessary in verbal transactions. It is to be presumed that if a man calls at a business place, he has armed himself with necessary data before he enters the office. To the salesman at a distance a letter is only a letter and, unheaded, does not show if the writer buys by the quarter gross or by the truck load. It does not show if he hawks from door to door or fits out liners with all they need for tropical voyages.

## Fairness.

In correspondence, a buyer should observe the same rule of fairness that applies to verbal purchasing. He should not obtain the lowest price for 20 tons when he really means to buy 28 lb. He should not give the impression that his purchases are for export and wholesale when his only transactions are over his own counter.

Some buyers have friends whom they treat generously, but watch with care. Mr. Brown buys all his tubes and castings from his old schoolfellow, Mr. Smith, but he is businesslike and he feels he must keep some check on Smith's prices.

So every tube and castings manufacturer from John o'Groats to Land's End is periodically invited to send lists and quotations, not with any thought of their ever getting an order, but that Mr. Smith's quotations may be checked; or, it may be, in order that Mr. Smith shall be kept posted as to how his firm is keeping him in a good position for competing.

Using firms in this way is unfair. Occasionally, it may happen that a trader cannot help himself, and must give a little trouble before he learns that a house is useless for his purposes. But, as a rule, when quotations are asked for, it should be in the spirit of "the best tender gets the order."

Estimates are sometimes costly and difficult to

work out; even the despatch of a printed price list involves time and trouble. There is no absolute "rule of the game" in buying—but there is such a thing as "playing the game."

## The Buyer's Office Work.

In office work, the simpler the system, the better.

It is possible for much of the buying of modern commerce to get down to a very small equipment, and no inducement should lead a buyer to add an unnecessary book or account to those that are the minimum of what his task requires.

In these days, when "system" is being extended in every direction, it is quite easy for a man to surround himself with a great deal of unnecessary impedimenta. Where a simple note-book and a convenient file for price lists will meet every reasonable need, it is a mistaken sense of duty to multiply books, filing cabinets, and card indexes.

The system of a buying office should be planned in relation to the actual business, and not in view of possible contingencies that may arise in other trading concerns. From time to time buyers for great firms publish their systems and methods, and these are valuable for study. But very rarely can a system, excellent in one case, be of much use to a firm doing a different kind of trade.

Here are some of the indispensable facts that should be noted.

## Actual Purchases.

Every transaction should be recorded when goods are bought, and the record should be available for checking the invoices when the goods are received.

Every purchase has also a relation with the Bought Ledger and the payment of accounts. The buyer may not be the man who signs the cheque, or who is responsible for its despatch, but, as the one who makes a contract in the name of the firm, his office method must ensure that full opportunity is given in the right place for that compact to be duly honoured.

In the system of some offices, all that is expected of the buyer in this respect is that, as goods are received, he shall confirm the correctness of the charge and pass on any necessary particulars about discounts and payment.

Here may be outlined the method adopted by one firm.

The buyer has a manifold book allowing for the use of two sheets of carbon paper.

The first impression is the order, passed to the salesman or posted to the supplying house.

The second is for the counting-house, enabling goods to be checked on receipt and necessary particulars to be noted when payment is made.

The third remains in the book for the buyer's own guidance and reference.

In a small office, where the buying and paying may be done by the same man, the second copy would be unnecessary.

## Sources of Supply.

A good buyer probably knows by heart and can tell off-hand where to obtain almost every article he needs. But none the less such facts should be recorded, as memory is sometimes fickle. More than this, a regular buyer may be ill or absent, and such information may be needed in a hurry.

Obviously, every article and every firm need not be entered in this list, for this would make too bulky a volume or index to be of use to anyone. It is, rather, the cream of what has been gathered during the past that should be noted—those facts that bear upon the policy and method of the firm.

Thus, there is a line that the firm supplies to its customers in the wholesale department that could not be handled at all at a profit unless trouble had been taken to get to original sources. Three such sources have been discovered by the buyer. One only is used. The other two are available. It is in the event of that one source drying up suddenly that it would be useful to have the record.

Or again. The firm manufactures and requires for one process a rather rare chemical in ample quantities. It is sometimes difficult to obtain this. Some record of supplying firms should be available.

Or again. The firm holds a buying agency by a very slender thread. In the case of a sudden break it would be important to be able to follow up trade immediately. Firms suitable for the purpose are not always remembered at a moment's notice.

Obviously, such a record as this would be rather private, and would, in consequence, be more suitable for a book than a card index.

## Price Lists.

Arrangements should provide for price lists being easily available. Sometimes these are bulky and occupy a great deal of space. Sometimes they consist of a single sheet of paper. A place for filing one kind hardly suits the other—but the simple plan of dividing them into two lots meets most needs.

When a man is buying for a single shop or department, and is master of all his own actions, he can cut his system down to very narrow confines. Without exactly relying upon memory, he can find a good memory, developed by practice and exercise, very useful in cutting out a great deal of troublesome formulating and card indexing.

However much the method may be deprecated as "old-fashioned" and "rule-of-thumb," the writer does not hesitate to recommend the buyer to get in the way of using memory boldly.

But when a business becomes complex in construction and in rules, some of the simple plans must be elaborated.

Thus, the man who buys goods for twenty retail branches cannot act in quite such a non-recording manner as the buyer for one only. He requires arrangements for dealing with, summarizing, and filing orders that come to him.

as simple as if he were buying for a single warehouse. The orders from the branches would practically be information to guide his buying. In all other ways they could be treated just as customers are treated—the goods invoiced to them and charged up in the usual method, and the goods despatched by rail or delivered by road.

In the second case, the buyer must somehow

*By permission* *The B.T.H. Co., Ltd.*

INDIRECT LIGHTING IN A DRUG STORE
("Eye-Rest" System with Mazda Lamps)

At once the task of the buyer involves an arrangement for dealing with orders in such a way that there is no confusion.

Buying here becomes involved in book-keeping; but both can still be kept on simple lines.

The buyer for twenty branch shops buys on one of two methods, or upon a mixture of both of them—

1. The goods are bought in bulk to be sent to the head warehouse and thence despatched to the branches; or

2. The goods are bought to be sent from supplying houses to the separate branches.

In the first case, the buyer's task remains almost

or other be in touch with the manager of each branch, so that, before invoices are accepted it should be possible for the quality and character of goods to be checked by the man who actually handles them. This point of contact might take the form of the branch manager's report on the goods he has received, or, what would be more usual, an invoice of the goods to the branch that the manager could accept or object to when the goods come to hand.

The point is this. If the buyer orders "A" quality to be sent to the branch in Coventry, and the supplying house sends "B" quality but charges for "A," the method must allow for

someone being responsible if wrong goods are accepted.

### Director's Signature.

Where a buyer is not armed with powers to act as a free agent, and all orders require a director's signature, the method already detailed of a triplicate order book can still hold good, for the signature upon the order would also give the buyer his copy.

### Goods in Transit.

"Goods in transit" are liable to throw out any careless system. Where copies of orders are kept on the fixed page of a triplicate book, the difficulty is quite easily met in most cases.

Where very heavy goods are bought, or such consignments as involve preparation of warehouse space, or extra men being employed to handle the goods, the buyer should notify those whom the arrival may affect.

### Simple Methods Best.

The writer may seem to advocate rather lax methods for the buyer. It is not an intentional objection to orderliness as such, but a belief that the buyer should keep himself as far as possible free from any limitation of method or machinery. System by all means in the counting-house, but simple up-to-date "expediency" in the buyer's office.

The buyer must be fresh and topical, and tabulating old figures and quotations is more likely to hinder than to help him. To be able to compare half a thousand quotations collected over years past from firms which may now be out of trade, is not so useful as the fresh replies to half-a-dozen post cards or telegrams received to-day.

The newspaper office is orderly and a marvellous machine, viewed as a triumph of organization, but there is one rather disorderly spot in it, where folk snatch eagerly at the latest telegram, and that is the editorial section. The editor leaves the system part of the business to the manager. The buyer may leave some of his to the counting-house. For the buyer and the editor must both be right up to date and have an instinct for making the best use of the latest news; this will repay them both better than all the system in the world.

## CHAPTER XI

## VARIOUS KINDS OF BUYING

The argument of the multiple shop, that by buying in large quantities, goods can be offered to the public at lower prices, takes hold of the public imagination and sets a problem to the individual shopkeeper. A firm with 200 branches may reasonably be expected to buy at a lower rate than a trader with only one shop.

In theory, this would seem to be the case; in actual practice it is doubtful. Departmental and overhead charges have a habit of growing with every addition to the complexity of an organization.

The real test is the individual case.

Two shops stand side by side in the main street of a provincial town. One is a branch of a great business with headquarters in London; the other is controlled by its owner, who has no other business.

In one is a manager, tied by the regulations of his firm, bound in all his trading by the opinions and decisions of control a hundred miles away, and obliged to sell on the average conditions that seem to best suit 200 branches.

In the other is an alert trader, well posted in local ideas and tastes, and free to buy what he wills and from any source.

It is very doubtful indeed, viewed in such a way, if the branch shop has the slightest advantage. The writer, as a personal opinion, would go farther and hold that, under free conditions of trade, all the advantage is with the unfettered single shop.

### Collective Buying.

But much advertisement and puffing has tended to fix in the minds of some traders a settled belief that by united buying better advantages can be gained.

Large numbers of experiments have been made along these lines, but, in view of the many endeavours, surprisingly few have resulted in any system of permanent value.

Usually, the method works out best when the number of joint buyers is very limited.

Thus: Spriggins & Co., Ltd., allow only an extra 2½ per cent discount on purchases of 5 cwt. of their "Breakfast Niblets." Mr. Chase, of High Street, cannot wisely buy such a quantity at a time—neither can Mr. Burdett, of Market Square. But both can do with half the quantity.

What more obvious than that one of the traders shall buy the complete parcel and divide with the other? In this way, 2½ per cent is saved.

So much for the simple sense of the transaction. In actual operation, however, Mr. Chase, who is a man of substance, buys the parcel, but after one or two similar deals finds a reluctance on Mr. Burdett's part to send across a cheque by the due date; for Mr. Burdett, behind the scenes, is finding difficulty in finance.

The real position is that Mr. Chase is taking wholesale risks on the account without any trading profit at all. Should Mr. Burdett fail, he will lose a great deal more than all the discounts saved can total to.

Again, a group of three or four buy a season's goods together, contracting for a large quantity to gain special terms.

Prices go down !

Those who have actual experience of traders know that there are men who will always repudiate a contract when prices go down. Competition and the desire for business make many firms rather chary of demanding the pound of flesh in such cases. But the presumption is, in such an event, that the trader who made the actual deal would honour the compact, as the best business men always do, and be promptly written down as a fool by the more casual-minded of the parties to it.

"Well, if he likes to pay up, that's his look out," is the easy way some would take in regard to such a transaction.

## Advantages and Disadvantages.

Co-operative buying, however, when carried out by firms of equal standing and with a clear sense of what is involved in the undertaking, is quite a commendable and workable action. Often it leads to increased friendliness of relationship and is of mutual benefit.

It is when the plan becomes unduly large in its scope that the liability to breakdown increases.

Many of the advocates of collective buying do so under a mistaken apprehension of the competition they are really meeting. They see the multiple shop as a powerful opponent and are apt to conclude that its power is chiefly financial—that it can buy and sell cheaper.

But the real power of the multiple shop is not financial—it is very much more sentimental. It gains its harvest from the psychological effects of a constantly repeated idea.

The multiple shopkeeper does in unbranded goods what the advertising manufacturer does in branded. "Daniel Dale's Bacon and Butter Stores," to be found in every good-sized city and suburb, keep repeating an idea about provisions that gains popularity the more often it is repeated.

A private buyer, moving from Croydon to Hampstead, passes from the comradeship of old friends to entirely new surroundings. But Daniel Dale, with his bacon and butter, is there to greet him. The same shop in appearance as the one he has left behind him; the same window, the same white-aproned assistants, the same cash desk at the entrance, the same butter, the same bacon—it's like a bit of old Croydon grafted on to breezy Hampstead !

The family shop is different. Tempest & Frith's shop has little or nothing in common with Harkbut & Roe's, except that they both stock the same brands of cocoa and Swiss milk.

One branch of a multiple shop business guarantees and advertises another. The effect of many is cumulative.

The breakdown of collective buying is to be accounted for by the fact that in all such attempts, emphasis is laid upon money-saving instead of brand building.

The idea of co-operation between the different units of trade—the thousands of individual shopkeepers—may one day take a successful form. But the genesis of this will not be in the buying department, as such. It is a project that more strictly belongs to organization and salesmanship, and those acts that go toward the creation of a joint goodwill.

## Department Store Buying.

The buyer in a department store is often the manager of his department, armed with ample powers, is allotted an amount of capital, and is judged entirely by results.

This man manages a shop inside a shop, and his task may seem to be somewhat similar to that of any individual trader.

But probably his chief difficulty is to keep his branch in harmony with the general business to which he belongs, so that he may benefit to the fullest from the custom and advertising of the whole, and so that his business may naturally lead to business in other departments.

This subject of harmony and agreement in character is dwelt upon here, as it constitutes a severe strain upon the skill of the buyer.

Thus, Willis & Co., Ltd., are a firm doing several kinds of business under the same roof, adding departments as adjacent premises can be obtained. They are noted as drapers doing a particularly high-class trade, and the furniture and boot and shoe departments they have added have maintained the tradition.

A china, glass, and earthenware department is added, and Mr. Wiltshire, a capable man, is appointed buyer, with absolute powers of control.

Now Mr. Wiltshire has a cheapness kink in his brain. He believes in the big shilling's worth—cheap and showy. Cut glass he will not risk, and brown Derby ware is, in his eyes, a drug on the market.

Quite obviously, there will be difficulties. Customers for china ware will pass on to the drapery section and retire amazed at the high prices. Drapery buyers recommended to buy a tea service will be astonished at the low quality.

The whole essence of the manifold business is that there shall be agreement of parts, and unless this is adhered to, there must be loss and dissatisfaction.

A buyer in such a place, too, needs to be a man who can work smoothly with others. The bold policy may be outlined by the firm, and each department have well-defined limits put upon its relative position. Each buyer may know precisely how much capital he can trade upon and what backing he is to receive by publicity outlay; how much window space he may depend upon, and the premises he is to occupy.

But there fall upon him certain unwritten obligations, if smooth working is to be maintained.

A large provincial firm suffered greatly some time ago through the silent, relentless warfare that was carried on between "Manchester Goods" and "Dress." The two buyers were rivals and their assistants took the cue, at first jocularly, but later, in some cases, in a competitive spirit that did not help trade.

Competition may be good up to a point, as may be rivalry. Two departments trying to show the larger profit or turnover may add a sporting interest to trade. But there sometimes comes a point where the object may be not "to increase ours," but "to diminish theirs."

The buyer, in such a case, must be alert enough to know the spirit of what is in the air, and genial enough to lead away from such dangerous possibilities.

## Factory Buying.

Factory buying is a special study in itself. As a rule, it falls into two parts, one of which involves large sums of money and heavy stocks, and the other smaller goods of great importance but not representing sufficient sums in cost to make further saving worth while.

Let us, for convenience, take the factory of a "hard confectioner," that is, the maker of toffee, chocolates, and those other dainties usually called "sweets."

Here, an easy difference can be drawn between the heavy bulk trade, such as sugar, and the smaller goods, such as essential oils, flavours, and vegetable colours.

The man who is buying sugar by the hundred tons must keep a close eye on fractions. Three halfpence a hundredweight makes a great deal of difference on the month. As important as this, too, is the arrangment for the arrival of such heavy goods in series, so that he shall be able to work on fairly even stocks. Warehouse space and the capital account must be considered in this work.

In buying essences and chemists' goods, there may not be the same need to try to save an eighth per cent on price. To do with a reputable supplying house may be a security worth paying for in a small difference. Equally, the fact of having three months' stock instead of three weeks' will not affect capital or space very much.

But here it is of almost first importance that there shall be sufficient stock of a kind when needed.

## The Chemist's Method.

Here, the chemist's method is useful. This is—

All stock is divided into two parts: (1) The forward part, which is the stock in actual use; and (2) the reserve stock, held to supply deficiencies as the forward stock is used up.

The stock is held in units, each one of which is sufficient to last for the longest period it will take for supplies to be ordered and to arrive, with a wide margin for contingencies. As soon as the last unit of any article is moved forward from the reserve, a new supply is ordered.

In factory buying, it is important to have a list of possible places of supply where goods can be obtained at almost a moment's notice. Even if quite fanciful prices may need to be paid for a small stock of an important ingredient, this comes cheaper than the works being held up.

## Perishable Goods Buying.

The buyer for a big restaurant or for a fruit and flowers shop, has a task for which no tabulated method quite fits him. Experience and actual practice are the only guides of value.

"How do you know what quantities to buy?" a fishmonger was asked. "I suppose a good memory helps."

"Yes. The nose is also a guide."

He meant that carelessness told its own tale in his business. The condemnation of bad buying would be in the air.

The chief study of the buyer of perishable goods is to get at the source of supply, and thus to have a guarantee of freshness. The traders who seriously mean business and who handle large quantities of fruit, vegetables, fish, meat, and other commodities likely rapidly to deteriorate, are not satisfied to deal through middlemen when they can get at original markets.

A famous Devonshire hotel makes a speciality of the salmon stream running through its grounds. The proprietor jokingly claims: "Fish specially caught for each meal." This may not be always strictly true, but sometimes it is no over-statement.

In London and big cities the buyer must be content to use the famous markets. He cannot fish the streams or gather the fruit, but he has some guarantee of freshness, or of careful holding in cold storage. Where the services of a middleman are used, enquiry into and experience of their methods may be necessary.

The shop or hotel holding stocks of perishable goods should itself have cold storage or ice chests available. This may not come in the buyer's province, but knowledge of available space for the purpose does.

## Business Built on Buying.

In most businesses the buyer is influenced by demand. The effort of the house is to find a market, and goods are bought to supply it.

But there are some traders who work upon the opposite of the rule. Goods are bought because they are cheap, and not in view of an existing trade for them. This kind of trading has many forms and runs through all commerce.

There is, for instance, the man who sees an eight-day clock going for 10s. 6d., and, knowing it is worth at least £5, he buys it. His real business

is that of fruiterer, and a place is found in the shop for the clock, till one day a customer enquires, bids for it, buys and takes it away.

We do not think of this kind of trader as a business man in the larger sense. But there are men who carry out this kind of work on a more commercial plan.

There is, for instance, the trader who specializes in damaged cargoes. He has ample money and business is that many of his deals are futile, for the best bargains get picked up before he has a chance to get a sale through.

## Options.

There is the rather bolder buyer in the same line of business who gets an option on certain goods. For instance, he buys 10 tons of goods at £43 per ton, paying £2 a ton for the right of

*Photo lent by* *Messrs. Fredk. Sage & Co., Ltd.*

AN EXCELLENT TYPE OF SHOP FRONT

Carried out in mahogany and bronze metal, with marble fascia and pilasters

will do a deal involving thousands. His speciality is that he knows the probable buyers, and he has a filing system that enables him at once to bring a bargain to the notice of a very large number of suitable clients.

## "If Unsold" Method.

Then, again, there is the man who deals on the "if unsold" method. Day by day there goes out from his office lists of parcels of goods that have been offered to him at a certain price within so many days if unsold in the meantime.

This is a difficult trade to work, for he must be a good buyer, must understand value, and really offer advantages. The trouble of his completing the deal within so many days. If he cannot sell them, he forfeits his money; if he can, he takes his profit. This plan seems little removed from the well-known option buying in the money market, but the difference lies in the fact that there are really goods to sell, and the profits are derived from actual sales.

## Importers' Business.

The best example, however, of the business in which the buyer is the chief figure and sales depend upon his work, is such a business as some London importers adopt.

There is a city office. There is a buyer, perhaps more than one, and there are several salesmen.

The buyer buys the best and cheapest parcels of goods in his market. It may be he specializes in sago, tapioca, rice, and similar imported goods. Each purchase, with samples, is notified to the salesmen, and it is for them to get the best prices they can over and above the price given.

The salesman gets a proportion of the profit (usually one-third), another portion goes to the buyer (usually one-sixth), and office, administration, capital, and proprietors' profits take the rest. The salesman tries to get as big a profit as he can on one hand, and to sell large parcels on the other, which tends to keep profits reasonable ; the buyer must buy well to get goods sold. Fluctuations in the market are added to or deducted from the prices daily. Thus, if a parcel is bought at 21s. per cwt. and the general market price of that commodity advances 1s. two days later, the remainder yet unsold is reckoned as bought at 21s.

In this method the buyer is usually subject to losses as well as profits. If goods have to be cut down in price in order to clear, he must stand his proportion of the loss.

## Buying for Foreign Houses.

At all times a difficult trade to enter, and often liable to loss at any moment, is the work of buying in England for firms abroad.

The agent-buyer in this class of work can be a very useful ally to the enterprising house in a foreign port. He needs a good knowledge of sources of supply, of possible commodities for the foreign market, of shipping customs, of tariffs and exporting laws, of insurance and similar matters.

As his business always hangs by a hair, he should be a man who spends much thought and care in viewing possible new business. He need not be at all bound or limited to subjects. The man who at present is English buyer (with full control of his time and rights to act as a free agent) for a drapery firm in Rio de Janeiro, may be very wise in trying to be the recognized purchaser of films for a picture palace company in Cape Town.

Such a man should keep an eye on new inventions and on new articles doing well in England. Equally, he should gain good information as to the importing houses, present and prospective, in foreign ports.

His chief difficulty is that foreign and colonial firms are enterprising, and are often tempted to change their methods. A good client may be a most valuable asset, giving quite a good income for quite easy work, and suddenly, perhaps through business changes, amalgamation, or change of policy, abruptly cease operations or buy on a different plan.

To meet this, the greatest amount of energy must be devoted to obtaining new clients and introducing new goods.

Let us take a case. A young man, we will say, has been appointed as English buyer for a firm in Cape Town. For his services he receives a retaining fee and a small percentage upon his purchases. His agreement states that he has power to buy goods up to a specified amount per month.

He receives instructions by cable from time to time as to the firm's requirements. Beyond these he is told to keep his eyes open and not to hesitate to buy small consignments of any goods likely to sell in South Africa, especially new articles, but on no account to repeat such purchases until they have been approved.

He has the advantage of being agent to an enterprising firm which does not hesitate to break fresh ground and test new trades : it does not matter whether the line is biscuits, dyes, gramophones, or wireless apparatus.

Such a man as we have in mind will no doubt very soon see that, while his ordinary purchasing will need to be done with care and despatch, his real value to his firm lies in finding new methods of advance and in being swift in action when he finds them. If a new article suitable for Cape Town appears on the home market, while other agents are sending samples and awaiting instructions he is able to buy a small consignment and ship at once.

Now, however successful such an agent-buyer may be, he will not feel entirely secure if he limits his service to one firm. His agreement permitting, he will act wisely if he seeks for other agencies of a similar nature. Cape Town—probably the whole of South Africa—would be barred to him, but there are other colonies and countries to which he can turn his attention ; and he should often be searching for other foreign and colonial firms whom he can also serve as a buyer.

## CHAPTER XII

## BUYING TO THE BEST ADVANTAGE

By Ernest Rigby

The trader who is in the happy position of being able to pay promptly for his requirements, ought to show at the end of a stocktaking period a nice profit on discounts. Assuming that his purchases for twelve months amount to, say, £4,000, it would mean on making payments to the wholesale houses on best terms (3¾ per cent) that an allowance of £150 would be made.

Unfortunately, there are small traders who are compelled, owing to shortage of capital, or perhaps owing to slackness and bad trade, to take the full credit limit and so forego any discount. Coming, as the writer does, into daily contact with the heads of many retail houses, he is of the opinion

*By permission* *Messrs. H. F. Gresham & Co. Ltd.*

THE INSPECTION DEPARTMENT OF A CLOTH FACTORY

that many of the traders who are to-day paying their accounts net, and have been doing so for some time past, could, by better organization of their finances, soon bring themselves to the position of being able to meet their accounts as they fall due on discount terms.

Let us take the usual terms which are allowed by most wholesale drapery houses.

These are as follows : 3½ or 3¾ per cent allowance for payments made on the 10th of the month for all goods purchased the month previous, i.e. Goods bought 1st June to 30th, paid 10th July : 3 per cent one month (1st June to 30th), paid 31st July ; 2½ per cent two months (1st June to 30th), paid 10th September.

Some wholesalers require net payments if two months' credit is exceeded ; others allow 1¼ per cent discount for three months ; but the majority make the account strictly net in the fourth month.

Where it is not convenient to pay on best discount terms, it is advisable that some system be adopted so that, in taking the discount decided upon—say 2½ per cent two months' credit—the fullest advantages are obtained from the firms from whom purchases are being made.

Blank, a draper, is purchasing from nine wholesale houses, and in the past has paid his accounts less 2½ per cent discount. On the usual two months' credit, this would work out that goods bought on the 1st to 31st of May would fall due for payment (two clear months—June, July) on 10th August.

Frequently, a trader will fail to obtain his discounts by being unable to pay on the due date for the following reasons : overbuying ; bad trade ; not getting the best terms when making his purchase.

## Overbuying.

This most frequently happens when purchasing from a firm's representative. The traveller is out to do big business, and, laying special emphasis upon the quick sales value of the samples he is showing, often persuades the small trader to buy far beyond what should be a " reasonable purchase risk." Result : a big lot of stuff is on the retailer's shelves when the account falls due two months later. This is altogether unnecessary, as no advantage is obtained in price—or very rarely—by purchasing twice as much as is considered necessary for ordinary requirements.

If the sale results are such that the glowing reports of the traveller are subsequently confirmed, it is only necessary for the retailer to write direct to the house with the request that the order be repeated.

By overbuying, he is not only accumulating bad stock—which later has, often enough, to be sold less a big discount—but, being unable to pay when due, he makes a loss on discounts.

Bad trade comes in cycles and, of course, cannot be avoided, and at such times it is advisable to buy simply on the hand-to-mouth principle.

As a check on overbuying, it is really essential for the small trader to exercise supervision over those employees in his firm who are responsible for making purchases. It has not infrequently happened that a man with a limited capital has been put in a very awkward position owing to buyers purchasing far in excess of their requirements ; in order to avoid this, it is advisable that buyers be instructed not to place any orders over a certain amount—fixing a limit—without bringing such orders to the principal for signature. This would have to be strictly carried out, and by this means an employer would be able to keep better grip and a satisfactory control over his buying section.

## Not Getting the Best Terms when Purchasing.

The retailer, generally speaking, does not exercise the same care in order to obtain the most favourable terms when purchasing as does the wholesaler.

Brown, retailer, who pays his accounts on the 10th of the month, taking two months' credit, makes a purchase amounting to £75 from a wholesale house on, say, 23rd August. Payment for this parcel falls due on 10th November. Possibly these goods are required immediately, and Brown cannot wait until 1st September to buy, when payment would not fall due until a month later, 10th December. But a request to the wholesaler to send goods at once and date invoice as 1st September would be granted. A small trader might, whenever purchasing, say, after the 19th of the month, make a point of asking for the invoice to be dated forward for the 1st of the following month.

This will help him considerably to make payments in order to obtain discounts as his accounts fall due, seeing that by this method he obtains an extra month's credit.

## Sale Dating.

At certain times of the year most wholesalers offer to date purchases of a certain value (usually £10 or over) two months ahead. That is to say, goods purchased the first week in March will be dated forward as 1st May, and payment which, in the ordinary way (on 2½ per cent two months' credit) would be made on 10th June, has not to be made until 10th August, so that, by buying on these sale days, the purchaser obtains an extra two months' credit. This dating forward is at times very helpful to the small trader, but, unfortunately, such a concession often leads to overbuying, the feeling being that, with a four months' credit allowance instead of the customary two, the bulk of the " parcel " will be sold before payment falls due.

1923

| | Invoices for Jany. | Due date 10th April | Invoices for Feby. | Due date 10th May | Invoices for March | Due date 10th June | Invoices for April | Due date 10th July | Invoices for May | Due date 10th Aug. | Invoices for June | Due date 10th Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *J. Brown & Co.* | 85 | Pd. 9/4/23 | 45 | Pd. 9/5/23 | | | | | | | | |
| *Smith & Jenkins* | 112 | ,, | 62 | ,, | | | | | | | | |
| *H. B. Bennett* | 97 | ,, | 28 | ,, | | | | | | | | |
| *H. Clarke* | 22 | ,, | 45 | ,, | | | | | | | | |
| *Bratt & Co., Ltd.* | 257 | bal'ce £50 | bal. 50 120 | ,, | | | | | | | | |
| *Johnson & Varley* | 67 | Pd. 9/4/23 | 23 | ,, | | | | | | | | |
| *Ward & Jones* | 185 | bal'ce £40 | bal. 40 152 | ,, | | | | | | | | |
| *J. H. Moult, Ltd.* | 195 | bal'ce £50 | bal. 50 85 | ,, | | | | | | | | |
| | 1,020 | | 560 | | | | | | | | | |
| Credits | 14 | | 23 | | | | | | | | | |
| | 1,006 | | 537 | | | | | | | | | |

Total purchases for 6 months ended June, 1923—

£ :

The small trader, especially the retailer, might with advantage make use of a form similar to the one shown on this page, in order to keep a close watch on his accounts as they fall due each month.

After adding up the amount of the invoices, the credits are deducted, so that the net total is shown.

One will see the advantage of this form in being able to see one's financial position two months ahead and previous to statements coming to hand.

When payments are not made in full, and balances are carried forward to the following month, such balances are not added to that month's purchases.

In any business, the small trader must be a smart buyer if he is to compete with success against the big houses. The man running a small business has to depend to a great extent on his own efforts, seeing that, in addition to buying, he has to do so many other things as well, whereas in the large concerns, there are buyers whose sole duty is to buy, without having to concentrate on other matters.

The small man, however, has a pull over the big houses of being able to give personal attention to the whole of his business and having his small staff immediately under his own observation.

A big asset of the small trader is to acquire the reputation by a speciality house, and this may be done, wherever possible, by obtaining from the wholesaler or manufacturer a line which is reserved to him for his town.

Before adopting a special line, it would, of course, be necessary to go thoroughly into the question of deliveries and getting the right prices. After obtaining a concession of this sort, another point would be to arrange with the wholesaler to send special lines or show piece with which demonstration could be made from time to time. In addition, the wholesaler or manufacturer will willingly loan blocks or electros which may be used by the small trader in getting up an attractive catalogue from time to time.

Before taking up a branded line, it is advisable to ascertain if the price is protected. If the price is not protected, the trader should not take it up, otherwise he is asking for trouble from which he will find it difficult to extricate himself.

The reason is that a competitor, in order to create an impression with the public that his is the cheapest house, will often enough cut the price. This would undoubtedly do a great deal of harm to a trader showing the same line at a higher price; consequently, it would be as well, before exploiting a branded line, to have an understanding that the price is protected with the whole of the trade.

## Keeping a Check on Purchases.

When purchasing, it is advisable to pass all orders through a departmental Order Book, so that, when goods and invoice are received, a proper check may be made against the prices, quantities, etc., as shown in the Order Book.

Unless this is done, there is the danger that

goods which have been delivered only in part, are not later on completed.

Let us assume that Blank, draper, orders 140 gross buttons, of which quality and numbers are given. Against this order an invoice is sent for 98 gross, and at the foot of this is a note that "We are unable to complete your esteemed order to-day; the balance we hope to send in about a week's time."

But a watch should be kept to see that completion is made, as remains of orders are often enough not sent until written for.

Another point in this connection is that a buyer finding his stock of a certain line getting low, will place a fresh order, often enough overlooking the fact that the balance of a previous order has not been delivered.

All that is required to keep a close watch on purchases is a duplicate Order Book, one sheet being sent to the manufacturer or wholesaler, and the other remaining in the book; as the goods come in, the Order Book is referred to, and when completion is made the lines are struck through in red ink.

When part deliveries only are made, the quantity sent is written up and the balance still to deliver is shown. An index is kept at the beginning of the book—a few pages only are necessary—in which are recorded the lines ordered, prices, etc., and manufacturer's name, along with the folio on which the order is entered.

Before ordering up any new lines, the buyer refers to this index, and can quickly ascertain particulars of all goods on order which have not been delivered.

CHAPTER XIII

## INDENTING

Purchases from overseas, both wholesale and retail, are sometimes made from travellers, who make long trips abroad. Occasionally an overseas buyer visits the home market. There are commercial hotels in many big cities which are the recognized headquarters of such visitors, and in some industries there are periodical seasons—as, for instance, the wool and fur sales—when buyers foregather from all parts of the world.

Most routine purchases from abroad pass through indenting houses. These are firms with branches or agents abroad and head offices in London, New York, etc., which undertake to purchase according to instructions, or indents, received, and on the best prevailing market conditions. They carry no stocks, but frequently possess or are allied with packing establishments where multifarious lines of goods are assembled and despatched.

The relations between an indenting house and its customers are on a most confidential basis. The indenting house does seek out the very best sources of supply, and manufacturers know that faulty deliveries or bad services will not be tolerated. The indenting house charges a fixed commission, guarantees payment to the supply house, and draws bills of exchange on its overseas customers.

In a few cases indenting firms are also warehousemen, establishing depots for stocks of standard lines in various foreign and colonial ports.

END OF VOLUME I